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CITY OF MONTRÉAL

Canada



Report of the Department of Health

Year 1946

By DOCTOR AD. GROULX, M.P.H., F.R.S.I. (E.), F.A.P.H.A.
DIRECTOR

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CITY OF MONTRÉAL

Canada



Report of the Department of Health

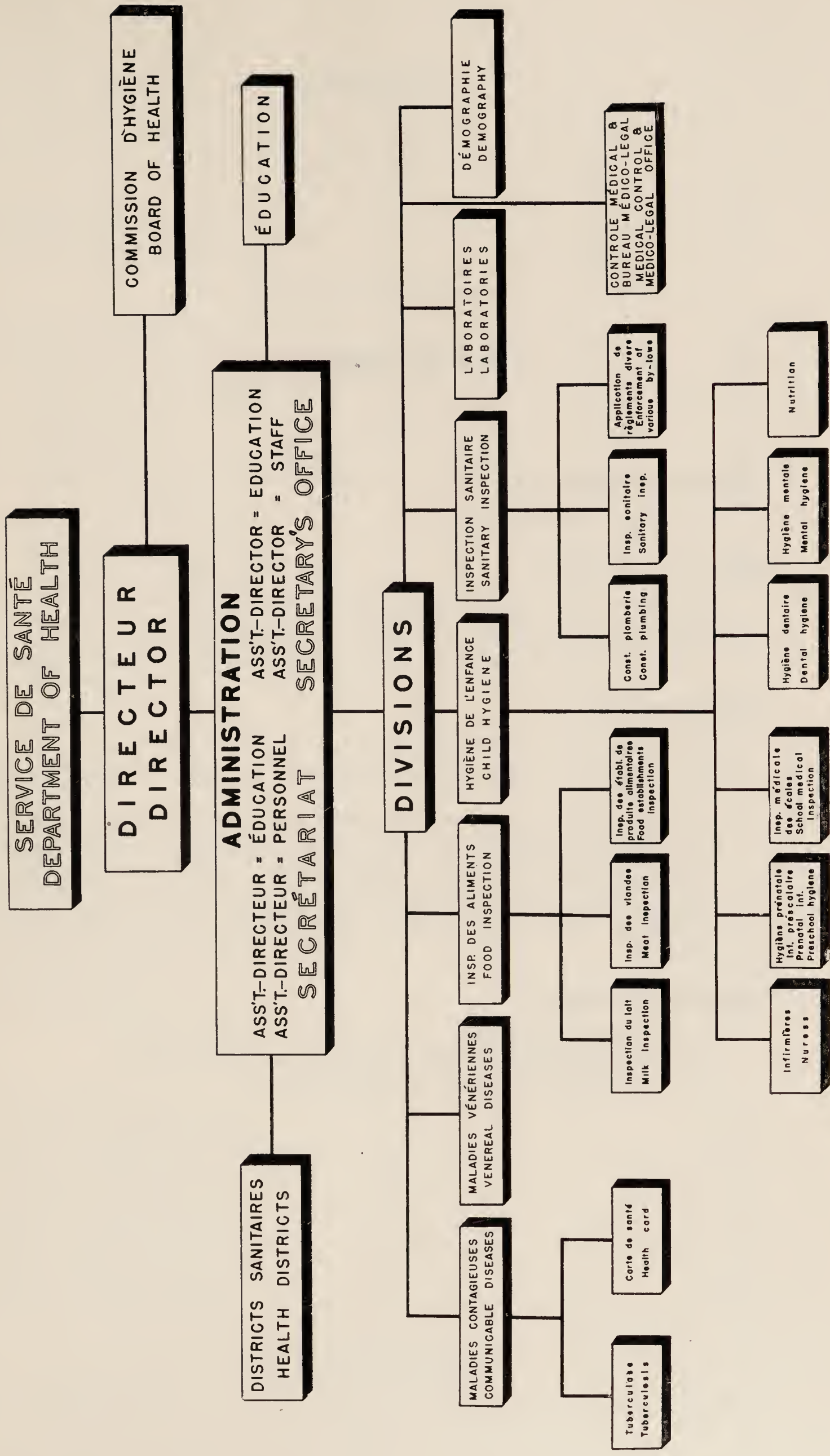
Year 1946

By DOCTOR AD. GROULX, M.P.H., F.R.S.I. (E.), F.A.P.H.A.
DIRECTOR

With the compliments of the

Director of the Department of Health

MONTREAL 1946



CITY OF MONTRÉAL

His Worship the Mayor:

Mr. Camillien Houde, C.B.E.

Executive Committee:

Councillor J. Omer Asselin, chairman,
Councillor Geo. C. Marler, n.p., m.l.a., vice-chairman,
Councillors Aimé Parent, A. Filion, E. Hamelin and R. F. Quinn, members.

Board of Health:

His Worship Mayor C. Houde, C.B.E., ex officio;
The Chairman of the Executive Committee, Councillor J. Omer Asselin,
ex officio;
The Director of the Department of Health, Dr. Adélar Groulx; ex officio;
Councillor W. R. Bulloch, Councillor Hector Prud'homme, m.d., Councillor
A. D. Quintin, Councillor Eudore Dubeau, l.d.s., Dr. Albert LeSage,
Dr. Gaston Lapierre, Dr. Albéric Marin, Dr. J. C. Meakins, Dr. R. Percy
Vivian, Dr. L. P. Ereaux, Mr. T. J. Lafrenière, Mr. R. de L. French,
Dr. Ernest Charron, Dr. D. P. Mowry, Mr. Paul A. Gagnon, Mr. Kenneth
Tyrrell.

Department of Health:

Dr. Ad. GROULX, M.P.H., F.R.S.I. (E.), F.A.P.H.A., director,
Dr. Adrien PLOUFFE, Dr. P.H., assistant director,
Dr. J. N. LAPORTE, D.P.H., assistant director.

CONTENTS

	Pages
Municipal administration.....	4
Staff of the Department of Health.....	7

DIRECTOR'S REPORT

Statement of expenditures (1946-1947).....	11
Demographic movement and commentaries.....	15
Population.....	15
Natural increase of population.....	15
Birth rate.....	16
Marriage rate.....	17
Death rate.....	18
Principal causes of general mortality.....	19
Maternal mortality.....	22
Infant mortality.....	24
Communicable diseases.....	29
Small-pox and vaccination.....	31
Diphtheria and immunization.....	33
Combined toxoid and whooping-cough.....	37
The tuberculosis situation.....	41
Division of venereal diseases.....	43
Child Hygiene.....	44
The nurses.....	47
Dental Hygiene.....	48
The Nutrition Campaign.....	49
Food and Milk Inspection.....	50
Sanitary Inspection.....	51
Laboratories.....	53
Medical Control.....	53
Vital Statistics.....	54
Public Health Education.....	55
Health Districts.....	56
The Staff.....	57
Scholarships.....	57
Sanitary Inspection Certificates (C.S.I.).....	58
The Poliomyelitis Situation in 1946.....	60
The Board of Health.....	83
Public Health Education.....	86
Section of the Health Districts.....	89

REPORTS OF DIVISIONS AND SECTIONS

Division of Communicable Diseases.....	101
Section of Tuberculosis.....	118
Division of Venereal Diseases.....	127
Division of Child Hygiene.....	135
Section of Dental Hygiene.....	165
Nursing Activities.....	169
Division of Food Inspection.....	173
Division of Sanitary Inspection.....	195
Division of Laboratories.....	217
Division of Medical Control.....	233
Division of Vital Statistics.....	237

Meteorological Report

Meteorological Abstract.....	328
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STAFF OF THE DEPARTMENT OF HEALTH

Year 1946

DIRECTOR'S OFFICE

Dr. AD. GROULX, M.P.H., F.R.San.I. (E.), F.A.P.H.A., director,
 Dr. ADRIEN PLOUFFE, Dr. P.H., assistant director,
 Dr. J. N. LAPORTE, D.P.H., assistant director,
 Mr. L. de G. SYLVESTRE, superintendent,
 1 Office Chief in charge of the budget,
 1 Archivist,
 1 Clerk, 4th class,
 2 Stenographer-secretaries,
 2 Typist-stenographers,
 1 Messenger.

Section of Health Districts

Dr. C. A. BOURDON, M.P.H., special officer and chief of the health districts,
 Dr. J. A. LANDREVILLE, M.P.H., special officer and assistant chief of the health districts,
 6 doctors, district health officers (Maisonneuve, Saint-Jacques, South-Western, Rosemont, N.D.G., de Lorimier and Northern),
 4 Typist-stenographers,
 2 Typists,
 2 Clerks, 2nd class,
 1 Stationary Engineer and Caretaker.

Store

1 Clerk, 4th class and storekeeper in charge,
 1 Clerk, 3rd class,
 1 Clerk, 2nd class.

DIVISION OF VITAL STATISTICS

Dr. ANT. B. VALOIS, M.P.H., demographer and superintendent,
 1 Office Chief,
 2 Clerks, 4th class,
 1 Clerk, 3rd class,
 4 Clerks, 2nd class,
 1 Typist-stenographer,
 1 Clerk, 1st class,
 1 Typist.

DIVISION OF COMMUNICABLE DISEASES

Dr. J. H. GERVAIS, D.P.H., superintendent,
 Dr. C. F. BAYARD, assistant superintendent,
 2 Public Health doctors,
 1 Nurse (supervisor),
 2 Nurses,
 3 Disinfectors,
 1 Clerk, 4th class,
 1 Clerk, 3rd class,
 1 Clerk, 2nd class,
 1 Typist-stenographer.

Section of Tuberculosis

Dr. LÉO LADOUCEUR, chief of section,
 1 Phtisiologist (doctor),
 1 Nurse (supervisor),
 3 Public Health Nurses,
 5 Nurses,
 1 Typist-stenographer,
 1 Clerk, 1st class,
 3 Typists.

DIVISION OF VENEREAL DISEASES

Dr. C. A. BOURDON, M.P.H., in charge temporarily,
 1 Bacteriologist (doctor),
 1 Public Health nurse,
 1 Typist-stenographer.

DIVISION OF CHILD HYGIENE

Dr. J. N. LAPORTE, D.P.H., assistant director and superintendent,
 Dr. L. DUBREUIL, M.P.H., assistant superintendent,
 4 Public Health Doctors,
 18 Doctors,
 Miss Maria Roy, R.N., head nurse,
 3 Assistant Head Nurses,
 7 Nurses (supervisors),
 41 Public Health nurses,
 83 Nurses, of whom:
 1 for test of hearing in schools and
 3 to supervise children's boarding houses and private hospitals,
 1 Clerk, 4th class,
 2 Clerks, 3rd class,
 1 Clerk, 2nd class,
 3 Typist-stenographers,
 1 Dietitian.

Section of Mental Hygiene

4 Psychiatrists (doctors),
 9 Public Health Nurses,
 1 Typist-stenographer.

Section of Dental Hygiene

Dr. R. R. LALONDE, L.D.S., chief of section,
 9 Dentists (full time),
 4 Dentists (part time),
 9 Nurses,
 1 Typist-stenographer.

Clinic of Orthodontia

Dr. PAUL GEOFFRION, chief,
 1 Technician,
 1 Nurse.

DIVISION OF FOOD INSPECTION

Dr. A. J. G. HOOD, D.M.V., superintendent,
 Dr. J. BRIEN, M.P.H., assistant superintendent,
 1 Chief of section,
 1 Clerk, 4th class,
 2 Clerks, 3rd class,
 1 Clerk, 2nd class,
 3 Typist-stenographers,
 2 Typists.

Section No. 1—Milk Inspection**Sub-section 1—Inspection in the country**

- 1 Veterinary, chief of section,
- 11 Veterinaries, inspectors.

Sub-section 2—Inspection in the city

- 1 Chief of section,

Group A:

- 8 Sanitary inspectors,

Group B: Pasteurization plants and special milk:

- 8 Sanitary inspectors.

Section No. 2—Meat Inspection

- 1 Veterinary, chief of section,
- 7 Sanitary inspectors,
- 8 Veterinaries, inspectors, at meat inspection stations,
- 2 Sanitary inspectors, at meat inspection stations,
- 1 Sanitary inspector (Ice and abattoir—outside of city).

Section No. 3—Inspection of dining-rooms, restaurants and bakeries

- 1 Chief of section,
- 10 Sanitary inspectors.

DIVISION OF SANITARY INSPECTION

Mr. L. P. CABANA, C.E., superintendent and sanitary engineer,
 Mr. AIMÉ COUSINEAU, C.E., consultant sanitary engineer,

- 1 Engineer, class 3,
- 1 Engineer, class 1,
- 1 Architect and examiner of building plans,
- 1 Plumbing plans examiner,
- 1 Clerk, 4th class,
- 1 Draughtsman, 3rd class,
- 2 Clerks, 2nd class,
- 1 Clerk, 1st class,
- 1 Typist-stenographer.

Section No. 1—Construction, plumbing

- 1 Chief of section,
- 1 Engineer, class 1,
- 1 Clerk, 3rd class,
- 9 Sanitary inspectors.

Section No. 2—Nuisances and sanitary records of dwellings

- 1 Chief of section,
- 1 Typist-stenographer,
- 16 Sanitary inspectors.

Section No. 3—Special By-laws

- 1 Chief of section,
- 1 Typist-stenographer,
- 1 Clerk, 2nd class,
- 9 Sanitary inspectors,
- 1 Special nurse.

Section No. 4—Supervision—refuse removal

- 1 Engineer, 2nd class,
- 1 Clerk, 3rd class,
- 1 Typist-stenographer,
- 10 Sanitary inspectors.

DIVISION OF LABORATORIES

Dr. R. BERARD, superintendent,
1 Bacteriologist (doctor),
1 Chemical engineer,
1 Chemist,
1 Assistant chemist,
2 Analysts,
2 Assistant analysts,
1 Preparer,
1 Laboratory assistant,
1 Typist-stenographer,
1 Typist.

DIVISION OF MEDICAL CONTROL

Dr. L. ROUX, superintendent and medico-legal counsel,
5 Doctors,
1 Clerk, 2nd class,
2 Typist-stenographers,
2 Typists,
1 Nurse and secretary.

ANNUAL REPORT

1946

**To the Chairman and Members
of the Executive Committee,**

Gentlemen:

I respectfully submit to your Committee the report of the Department of Health for the year 1946.

In the first part, I show the statement of expenses for the fiscal year 1946-1947; in the second part, I make certain commentaries in connection with the demographic movement and the development of certain contagious diseases; finally, in the third part of this report, I explain certain improvements made in the Department of Health during the year 1946.

Then, follow the several reports from the different divisions and sections of the Department of Health.

STATEMENT OF EXPENDITURES

Year 1946-47

I must note that the fiscal year does not correspond with the calendar year, as it now begins on May first of each year to end on April 30th of the following year.

Consequently, expenditures mentioned in the following table correspond with the new fiscal year adopted by the City while the

rest of the annual report, the reports from divisions, tables, etc., are still, as in the past, based on the calendar year.

The total expenditures of the Department of Health for the fiscal year 1946-47 were \$1,221,026.57, divided as follows:

Health properly so-called	\$ 1,173,026.57
Grants to semi-official organizations doing public health work	48,000.00
	<hr/>
Total	\$ 1,221,026.57
	<hr/> <hr/>

In order to estimate the expenditure per capita of population we must take as a basis the figures for 1946; the population being set at 1,007,000, we arrive at the following figure:

	Amount	Per capita
Total expenditures.	\$1,221,026.57	\$ 1.113
	<hr/>	<hr/>

The following list shows in detail the division of expenditures for the fiscal year 1946-47.

GENERAL EXPENDITURES 1946-47

MANAGEMENT

Salaries and wages	\$ 44,653.69	
Administration	9,092.29	\$ 53,745.98
	<hr/>	

Education

Administration	\$ 5,378.77
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Health Districts

Salaries and wages	\$	53,382.95		
Administration		8,255.06	\$	61,638.01

VITAL STATISTICS

Salaries and wages	\$	28,204.12		
Administration		3,700.16	\$	31,904.28

COMMUNICABLE DISEASES

Salaries and wages	\$	49,667.75		
Administration		30,037.88	\$	79,705.63

Section of Tuberculosis

Salaries and wages	\$	31,403.46		
Administration		8,570.19		
Contributions and grants		48,000.00	\$	87,973.65

VENEREAL DISEASES

Salaries and wages	\$	5,158.34		
Administration		707.57	\$	5,865.91

CHILD HYGIENE

Salaries and wages	\$	342,827.89		
Administration		66,209.63	\$	409,037.52

Mental Hygiene

Salaries and wages	\$	29,252.33		
Administration		626.48	\$	29,878.81

Dental Hygiene

Salaries and wages	\$	63,661.38		
Administration		5,619.98	\$	69,281.36
<hr/>				

FOOD INSPECTION

Salaries and wages	\$	155,758.95		
Administration		32,198.28	\$	187,957.23
<hr/>				

SANITARY INSPECTION

Salaries and wages	\$	115,071.39		
Administration		21,102.56	\$	136,173.95
<hr/>				

LABORATORIES

Salaries and wages	\$	37,157.06		
Administration		4,821.19	\$	41,978.25
<hr/>				

MEDICAL CONTROL

Salaries and wages	\$	17,192.99		
Administration		3,314.23	\$	20,507.22
<hr/>				

TOTAL

Salaries and wages	\$	973,392.30		
Administration		247,634.27	\$	1,221,026.57
<hr/> <hr/>				

Demographic movement and comments

POPULATION

The figure of Montréal's population evaluated by the assessor of the City for 1946 is 1,096,060. This figure is the "de facto" population, including the permanent population and the floating population, composed of persons residing in the City since less than one year.

From the point of view of demographic statistics, to set birth and mortality rates for the population resident in Montréal alone, we have to take as basis the "de jure" population, which is the population resident in Montréal, leaving aside the floating population.

For 1946, as at July 1st, 1946, the "de jure" population of Montréal is calculated and set at 1,007,000 by the demographer of the Department of Health. In this estimate, he has taken as a basis, firstly, the results of the federal decennial census, taking into account the following factors: natural increase of population, immigration and emigration.

All figures published in this report, except where otherwise stated, have been calculated after eliminating the non-residents and including persons resident in Montréal who have been born or have died elsewhere.

NATURAL INCREASE OF POPULATION

This figure is arrived at by calculating the surplus of births over deaths.

The surplus of births over deaths in 1946 was 13,788, as against an average of 9,605 for the ten years from 1936-1945, showing an increase of 4,183 for the year 1946.

The natural increase of the population gives a rate of 13.7 per 1,000 population for 1946.

Table I

Number of births and deaths and natural increase for year 1946 and by five and ten-year periods since 1936

Period	Births (1)	Deaths (1)	Surplus of births over deaths
1936-1940 (5 years).....	86,796	46,284	40,512
1941-1945 (5 years).....	104,355	48,814	55,541
1936-1945 (average for 10 years)	19,115	9,510	9,605
1946.....	23,555	9,767	13,788

(1) All these demographic statistics are based on a distribution of births and deaths, made according to the residence in Montréal or elsewhere.

BIRTH RATE

The number of births in 1946 totalled 23,555 compared with 22,075 in 1945, showing an increase of 1,480 births over the preceding year.

The proportion per 1,000 population is 23.4, an increase of 1.0 over 1945, also an increase of 1.4 over the average for the five years 1941-1945 and of 2.5 over the average for the ten preceding years.

Table II shows a comparison between the number and rate births for 1946 with those of the ten previous years, taken separately and in five and ten-year periods.

Table II

Population, number of births and rate per 1,000 population for each year and for 5 and 10-year periods from 1936-1946

Year	Population	Number of births	Rate per 1,000 population
1936	860,800	16,725	19.4
1937	869,200	17,180	19.8
1938	877,700	17,062	19.4
1939	886,100	17,116	19.3
1940	894,600	18,713	20.9
Average	877,680	17,359	19.8
1941	903,007	19,011	21.0
1942	926,000	20,606	22.2
1943	950,600	21,595	22.7
1944	972,000	21,068	21.7
1945	986,000	22,075	22.4
Average	947,521	20,871	22.0
10-year average	912,600	19,115	20.9
1946	1,007,000	23,555	23.4

MARRIAGE RATE

The number of marriages in 1946 was 11,669; there were 10,470 in 1945, thus there was an increase of 1,199 over the preceding year.

The proportion per 1,000 population was 11.6 for 1946, compared with 10.6 for 1945, an increase of 1.0 over the preceding year; it is an increase of 0.2 over the average for the five years from 1941-1945 and of 0.5 over the average of the ten years between 1936 and 1946.

Table III gives a comparison of the rate and number of marriages in 1946 with those of the ten previous years, yearly and in five and ten-year periods.

Table III

Population, number of marriages and rate per 1,000 population for each year and for 5 and 10-year periods from 1936-1946

Year	Population	Number of marriages	Rate per 1,000 population
1936.....	860,800	7,633	8.9
1937.....	869,200	8,305	9.6
1938.....	877,700	8,608	9.8
1939.....	886,100	10,650	12.0
1940.....	894,600	12,326	13.8
Average.....	877,680	9,504	10.8
1941.....	903,007	10,897	12.1
1942.....	926,000	11,781	12.7
1943.....	950,600	10,713	11.3
1944.....	972,000	10,029	10.3
1945.....	986,000	10,470	10.6
Average.....	947,521	10,778	11.4
10-year average.....	912,600	10,141	11.1
1946.....	1,007,000	11,669	11.6

DEATH RATE

The number of deaths in 1946 totalled 9,767, compared to 9,481 in 1945, or an increase of 286 over the previous year.

The proportion of deaths per 1,000 population in 1946 was 9.7; it was 9.6 in 1945, showing an increase of 0.1 over the preceding year.

Table IV shows the death rate movement since 1936 for each year and for 5 and 10-year periods.

Table IV

Population, number of deaths and rate per 1,000 population for each year and for 5 and 10-year periods from 1936-1946

Year	Population	Number of deaths	Rate per 1,000 population
1936.....	860,800	8,934	10.4
1937.....	869,200	9,738	11.2
1938.....	877,700	9,125	10.4
1939.....	886,100	9,191	10.4
1940.....	894,600	9,296	10.4
Average.....	877,680	9,257	10.5
1941.....	903,007	9,711	10.8
1942.....	926,000	9,532	10.3
1943.....	950,600	10,182	10.7
1944.....	972,000	9,908	10.2
1945.....	986,000	9,481	9.6
Average.....	947,521	9,763	10.3
10-year average.....	912,600	9,510	10.4
1946.....	1,007,000	9,767	9.7

PRINCIPAL CAUSES OF GENERAL MORTALITY

The diseases caused by degeneration, those of the heart, cancer and nephritis are the three main causes of deaths during 1946. These three diseases show an increase over the preceding year, with respective rates of 249.1, 144.9 and 120.4 per 100,000 population, against 237.5, 136.1 and 119.8 in 1945.

Tuberculosis and mortality from accidents show an increase; other causes of death: neo-natal diseases, pneumonia, cerebral hemorrhage with or without arterio-sclerosis, and diabetes have decreased.

For the second consecutive year in the health history of Montréal, the rate of general mortality in Montréal, 9.7 per 1,000 population, is below 10 per 1,000 population.

The general death rate for residents of Montréal is quite low if we consider the dangers to which they are exposed. The increasingly cosmopolitan character of the population which invades our metropolis, overcrowding in dwellings, contacts with germ carriers, all are factors which tend to present dangers to the public.

Table V

Relative rank of the ten chief causes of death, number of deaths, rate per 100,000 population—1945-1946

Rank	Causes of death (1)	Number of deaths		Rate per 100,000 population	
		1945	1946	1945	1946
1	Heart diseases (90-95 except 94).....	1,744	1,878	176.9	186.5
2	Cancer (45-55).....	1,342	1,459	136.1	144.9
3	Nephritis (130-132).....	1,181	1,112	119.8	120.4
4	Tuberculosis, all forms (13-22).....	613	658	62.2	65.3
5	Disease of coronary arteries (angina pectoris) (94).....	596	630	60.4	62.6
6	Neo-natal diseases(158-161).....	619	567	62.8	56.3
7	Pneumonia (107-109).....	468	461	47.5	45.8
8	Accidents (169-195).....	380	420	38.5	41.7
9	Cerebral hemorrhage, with or without arterio-sclerosis (83-97).....	471	410	47.8	40.7
10	Diabetes (61).....	285	259	28.9	25.7

(1) Numbers in parentheses correspond to those of the classification of causes of death according to the international list of 1939.

Table VI

Population, number of deaths from certain main causes and rate per 100,000 population, per year
and for 5 and 10-year periods—1936-1946

Year	Popula- tion	Heart diseases			Cancer			Chronic nephritis			Broncho-pneumonia			Pneumonia (other forms)		
		Number of deaths	% of total deaths	Rate per 100,000 pop.	Number of deaths	% of total deaths	Rate per 100,000 pop.	Number of deaths	% of total deaths	Rate per 100,000 pop.	Number of deaths	% of total deaths	Rate per 100,000 pop.	Number of deaths	% of total deaths	Rate per 100,000 pop.
1936.....	860,800	1,551	17.36	180.18	990	11.08	115.01	1,003	11.23	116.52	469	5.25	54.48	259	2.90	30.09
1937.....	869,200	1,598	16.41	183.85	1,031	10.59	118.61	965	9.91	111.02	449	4.61	51.66	330	3.39	37.96
1938.....	877,700	1,631	17.87	185.83	1,099	12.04	125.21	975	10.68	111.19	382	4.19	43.52	278	3.05	31.67
1939.....	886,100	1,826	19.87	206.07	1,141	12.41	128.85	1,078	11.73	121.66	326	3.55	36.79	243	2.64	27.42
1940.....	894,600	2,028	21.82	226.69	1,249	13.44	139.62	1,125	12.10	125.75	256	2.75	28.62	193	2.08	22.69
Average.....	877,680	1,727	18.66	196.77	1,102	11.90	125.56	1,029	11.12	117.24	376	4.06	42.84	261	2.82	29.74
1941.....	903,007	2,035	20.96	225.36	1,251	12.88	138.54	1,100	11.33	121.82	257	2.65	28.46	188	1.94	20.93
1942.....	926,000	1,952	20.48	210.80	1,226	12.86	132.40	1,099	11.32	118.68	200	2.10	21.60	161	1.69	17.39
1943.....	950,600	2,335	22.93	245.63	1,297	12.74	136.44	1,299	12.76	136.65	254	2.49	26.72	215	2.11	22.62
1944.....	972,000	2,392	24.14	246.09	1,323	13.35	136.11	1,034	10.44	106.38	250	2.52	25.72	183	1.85	18.83
1945.....	986,000	2,340	24.68	237.32	1,342	14.15	136.10	951	10.03	96.45	286	3.02	29.01	182	1.92	18.46
Average.....	947,521	2,211	22.65	233.34	1,288	13.19	135.93	1,097	11.24	115.78	249	2.55	26.28	186	1.90	19.63
10-years average....	912,600	1,969	20.70	215.76	1,195	12.56	130.94	1,063	11.18	116.48	313	3.29	34.30	223	2.34	24.44
1946.....	1,007,000	2,518	25.78	250.05	1,459	14.94	144.88	1,172	12.00	116.38	279	2.86	27.71	182	1.86	18.07

MATERNAL MORTALITY

The number of maternal deaths in 1946 was 39 compared with 46 in 1945; it was 88 in 1936.

The death rate of maternal mortality per 1,000 births in Montréal was 1.6 in 1946, compared to 2.1 in 1945, a decrease of 0.5 over the preceding year. In 1936, the rate was 5.3.

Table VII shows the lowering of the death rate since 1936, from 5.3 to 1.6, a very appreciable decline of 3.7 in the past decade.

Table VII

Number of living and stillbirths, number of maternal deaths and death rate per 1,000 living births and per 1,000 living and stillbirths per year and for 5 and 10-year periods—1936-46

Year	Births			Number of maternal deaths	Rate per 1,000 births	
	Live	Still (1)	Total		Live	Live and still
1936.....	16,725	778	17,503	88	5.3	5.0
1937.....	17,180	774	17,954	81	4.7	4.5
1938.....	17,062	781	17,843	77	4.5	4.3
1939.....	17,116	752	17,868	54	3.2	3.0
1940.....	18,713	888	19,601	70	3.7	3.6
Average....	17,359	795	18,154	74	4.3	4.1
1941.....	19,011	928	19,939	66	3.5	3.3
1942.....	20,606	1,035	21,641	62	3.0	2.9
1943.....	21,595	1,000	22,595	68	3.2	3.0
1944.....	21,068	842(1)	21,910	69	3.3	3.1
1945.....	22,075	826	22,901	46	2.1	2.0
Average....	20,871	927	21,798	63	3.0	2.9
10-years average..	19,115	861	19,976	69	3.6	3.4
1946.....	23,555	848	24,403	39	1.6	1.6

(1) These figures are based on the following definition: a still-born is a product of conception which has never breathed, whatever may be the period of gestation. A living birth is any product of conception which has breathed. These definitions have been adopted by the Congress of Canadian Statisticians, October 1943.

Causes of maternal mortality

The principal causes of maternal mortality are divided into two categories, as shown in the following table. We enumerate first the causes attributable to pregnancy itself in order of incidence: toxæmia, 0.25; infection, 0.25; then those occurring during or after child-birth: hemorrhages, 0.47; toxæmia, 0.21; infection or septicemia, 0.13; other diseases and accidents, 0.13.

The number of deaths among pregnant women from toxæmia seems to indicate lack of pre-natal care. Abortion is one of the principal causes of infection during pregnancy.

Table VIII

Chief causes of maternal deaths, number of deaths, and the rate per 1,000 live births for the years 1945-1946

Causes	Number of deaths		Rate per 1,000 live births	
	1945	1946	1945	1946
A—During pregnancy				
Infection	2	6	0.09	0.25
Abortion without infection . .	1	0	0.05	0.00
Ectopic gestation	1	3	0.05	0.13
Toxaemia	12	6	0.54	0.25
Hemorrhages	0	0	0.00	0.00
Other diseases and accidents during pregnancy	2	2	0.09	0.09
B—During and after child-birth				
Infection	6	3	0.27	0.13
Toxaemia	5	5	0.22	0.21
Hemorrhages	9	11	0.41	0.47
Other diseases and accidents .	8	3	0.36	0.13
Grand total	46	39	2.08	1.66

INFANT MORTALITY

The number of deaths registered in 1946 among children under one year of age totalled 1,160 compared to 1,351 in 1945, showing a decrease of 191 deaths.

The death rate per 1,000 live births was 49.2 in 1946, compared to 61.2 in 1945, showing a decrease of 12.0.

Table IX

Population, births (less still-born), the birth rate per 1,000 population, deaths among infants under one year and the death rates per 1,000 live births in five-year periods 1900-1946

Year	Population	Births		Deaths 0 to 1 year	
		Number	Rate per 1,000 inhab- itants	Number	Rate per 1,000 live births
1900-1904.....	290,746	10,074	34.6	2,767	274.7
1905-1909.....	387,880	13,296	34.3	3,571	268.6
1910-1914.....	482,037	19,047	39.5	4,195	220.2
1915-1919.....	558,280	20,089	36.0	3,677	183.0
1920-1924.....	639,481	21,013	32.9	3,375	160.6
1925-1929.....	738,500	20,907	28.3	2,651	126.8
1930-1934.....	824,695	19,711	23.9	2,087	105.9
1935-1939.....	869,220	17,089	19.7	1,419	83.0
1940-1944.....	929,241	20,199	21.7	1,303	64.5
1945.....	986,000	22,075	22.4	1,351	61.2
1946.....	1,007,000	23,555	23.4	1,160	49.2

Deaths among illegitimate children

The high death rate of illegitimate children has the effect of keeping the general infant death rate very high in Montréal.

Table X shows the divergency between the death rates among legitimate children, which is 45.9 per 1,000 live births and that of illegitimate children which reaches 113.4 per 1,000 live births, for 1946.

Mortality among illegitimate children has shown a decrease compared with 1945; the rate of 113.4 per 1,000 live births for 1946 compares with 136.4 for 1945, a decrease of 23.0.

Table X

Number of births, deaths under 1 year and rate per 1,000 live births, legitimate and illegitimate, for 1946

Category	Births	Deaths under 1 year	Rate per 1,000 births
Legitimate.....	22,391	1,028	45.9
Illegitimate.....	1,164	132	113.4
Total.....	23,555	1,160	49.2

Principal causes of infant mortality

Table XI shows the main causes of death among children under one year of age for 1946. It also shows the relative rank of each in order of frequency.

Table XI

Ten main causes of death under 1 year, rank, number, rate per 1,000 live births and percentage of total deaths

Rank	Causes of death	Number	Percentage	Rate per 1,000 live births
1	Premature births.....	332	28.6	14.1
2	Congenital malformation....	213	18.4	9.0
3	Pneumonia.....	163	14.1	6.9
4	Effects of delivery.....	133	11.5	5.6
5	Diarrhoea and enteritis.....	71	6.1	3.0
6	Other diseases of newborn babies.....	54	4.7	2.3
7	Congenital debility.....	48	4.1	2.0
8	Contagious diseases.....	40	3.4	1.7
9	Otitis and mastoiditis.....	30	2.6	1.3
10	Syphilis.....	13	1.1	0.6
	Other causes.....	63	5.4	2.7
	Total.....	1,160	100.0	49.2

This table shows that premature delivery stands in first place. Congenital causes taken together: premature births, congenital malformation, congenital debility and other diseases of new-born babies, give a total of 27.5 per 1,000 live births; their total reaches 647, or 55.8% of deaths at this age. Pneumonia is in second place with 14.1%. Diarrhoea and enteritis account for 6.1% of deaths.

Table XII

Number of deaths under one year, by months, sex and age groups, with percentages per age group and rate per 1,000 live births—1946

Month	Sex	Under 24 hours	1 day to 6 days	1 week to 3 weeks	1 month	2 months	3 months	4 months	5 months	6 months	7 months	8 months	9 months	10 months	11 months	Total	
January.....	M F	27 25	5 8	7 2	1 5	3 3	3 3	5 1	3 1	2 1	3 1	2 0	0 0	0 0	1 1	62 51	113
February.....	M F	16 10	9 3	10 3	6 4	4 0	0 4	1 0	1 0	0 2	1 0	0 0	1 1	0 0	0 1	49 28	77
March.....	M F	22 18	14 11	3 4	2 1	4 4	8 5	2 1	3 2	1 1	1 0	2 1	2 1	0 1	1 0	65 50	115
April.....	M F	17 19	8 14	8 4	2 4	2 2	1 1	2 2	0 2	2 2	0 0	1 2	0 1	1 1	2 1	46 55	101
May.....	M F	19 12	12 5	7 5	4 3	1 3	0 2	1 2	1 0	1 0	0 0	2 0	2 1	0 0	2 2	52 35	87
June.....	M F	28 19	11 4	7 5	3 2	4 5	3 1	2 1	3 1	1 3	4 4	2 1	1 3	1 0	1 0	71 49	120
July.....	M F	24 25	10 2	6 2	2 2	3 1	1 0	2 0	1 0	0 0	0 1	0 0	1 0	1 0	1 0	52 33	85
August.....	M F	21 15	5 4	5 9	6 1	5 3	0 1	2 0	1 0	0 0	1 0	0 0	0 0	0 1	1 0	47 34	81
September....	M F	17 7	12 6	8 3	4 2	1 2	2 5	1 2	2 1	0 1	0 3	1 2	1 1	0 0	0 0	49 35	84
October.....	M F	16 10	7 6	11 1	6 2	3 3	2 3	1 1	1 0	3 0	0 0	0 2	2 1	0 0	1 0	53 29	82
November ...	M F	18 16	19 8	5 3	2 1	5 1	4 0	1 1	0 2	0 0	1 0	1 1	0 0	0 0	0 0	56 33	89
December.....	M F	19 14	15 5	10 8	3 2	5 7	3 9	3 2	5 3	3 1	1 1	3 0	1 1	1 0	1 0	73 53	126
Total.....	M F	244 190	127 76	87 49	41 29	40 34	27 34	23 13	21 12	13 11	12 10	14 9	11 10	4 3	11 5	675 485	1,160
Grand total.....		434	203	136	70	74	61	36	33	24	22	23	21	7	16	1,160	
Percentage.....		37.4	17.5	11.7	6.0	6.4	5.3	3.1	2.8	2.1	1.9	2.0	1.8	0.6	1.4	100.0	
Rate per 1,000 live births.....		18.4	8.6	5.8	3.0	3.1	2.6	1.5	1.4	1.0	0.9	1.0	0.9	0.3	0.7	49.2	

Diarrhoea and Enteritis

For 1946, the death rate per 1,000 live births due to diarrhoea and enteritis was 3.0 compared with 7.0 in 1945, a decrease of 4.0 per 1,000 live births.

Table XIII which follows gives the number and rate of deaths from one of the cause groups—diarrhoea and enteritis—affecting infant mortality which was for a long time the chief cause but which has considerably diminished in recent years.

Table XIII

Number of births (still-born excluded), deaths from diarrhoea among children under one year of age, birth rate per 1,000 population and death rate per 1,000 live births, for 5-year periods—1920-1946

Year	Population	Births		Deaths from diarrhoea 0-1 year	
		Number	Rate 1,000 inhabitants	Number	Rate 1,000 live births
1920-1924.....	639,481	21,013	32.9	1,354	64.4
1925-1929.....	738,500	20,907	28.3	893	42.7
1930-1934.....	824,695	19,711	23.9	645	32.7
1935-1939.....	869,220	17,089	19.7	244	14.3
1940-1944.....	929,241	20,199	21.7	172	8.5
1945.....	986,000	22,075	22.4	155	7.0
1946.....	1,007,000	23,555	23.4	71	3.0

DIVISION OF COMMUNICABLE DISEASES

Communicable diseases, in general, despite the epidemic cycle of a few of them, are not so prevalent as they were before. From a communicable diseases point of view, 1945 was a record year and in 1946, the statistics would have been most favourable if it were not for the incidence of measles and the epidemic of poliomyelitis.

The total number of communicable diseases reported and registered in 1946 (without including "la grippe" and tuberculosis) is 12,299 cases and 90 deaths, an increase of 1,830 cases in comparison with 1945 when 10,469 cases and also 90 deaths were registered. The number of cases, however, remains below the average for the last 10 years. As for the fatality rate per 100 cases, it has been, in 1946, of 0.73, when the average for the last five years has been of 0.77.

In 1946, 26 cases of **typhoid fever** were registered **without a single death**, for the first time in the health history of Montréal. In 1945, there were 49 cases and 12 deaths. On the other hand, 8 cases of paratyphoid fever were registered with 2 deaths; in 1945, we registered 9 cases and also 2 deaths.

There was fewer cases of and deaths from **diphtheria** during 1946: 149 cases and 22 deaths with a mortality rate of 2.2 per 100,000 population, as compared to 190 cases and 23 deaths, in 1945, or a mortality rate of 2.3 per 100,000 population. The diphtheria situation has been aggravated by an increase of cases and deaths during the months of November and December 1946. This unimproved situation is inconceivable and inadmissible with the facilities of immunization at the disposal of parents.

Whooping-cough, against which infants and children could be protected by the combined vaccine which immunizes at the same time against diphtheria and whooping-cough, shows an appreciable decrease in 1946, with 532 cases and only 3 deaths, or a mortality rate of 0.3 per 100,000 population, against 2,368 cases and 30 deaths, or a rate of 3.0 per 100,000 population in 1945. **Mumps** with 226 cases in 1946, against 2,751 cases in 1945 and chicken-pox with 1,973 cases and no death in 1946, against 2,489 cases and one death in 1945, also show a decrease.

Other communicable diseases have increased: **scarlet fever** with 1,016 cases but without a single death for the first time in

Montréal, German-measles with 362 cases and meningococcal meningitis with 12 cases and 12 deaths.

The prevalence of measles according to an epidemic cycle from January to June 1946, with 7,207 cases and 10 deaths, is an explanation of the increase of the mortality rate attributable to this disease this year; this rate is of 1.0 per 100,000 population against 0.2 in 1945.

The mortality rate from all forms of **tuberculosis** again shows an increase in 1946. This gives an idea of the acuity of the problem; 658 deaths were registered this year as compared to 613 in 1945; the rate per 100,000 population is 65.6 this year against 62.2 in 1945.

The number of cases of pneumonia has decreased in 1946 and this disease has caused 461 deaths, or a mortality rate of 45.8 per 100,000 population, as compared to 47.5 in 1945.

Poliomyelitis appeared in Montréal as an epidemic in 1946 from the middle of June to the end of October; 684 cases and 25 deaths were registered, or a mortality rate of 2.5 per 100,000 population. A detailed report regarding this epidemic is published at page 60 of this report.

The Control of Communicable Diseases

To assure the control of communicable diseases, the doctors of the Department of Health made 6,212 control visits and our nurses 19,817 visits to the homes; 1,643 houses were placarded and 1,971 disinfections were made in homes; 3,366 cases of communicable diseases were cared for in Pasteur and Alexandra hospitals.

Health Card

In 1946, following the recommendation of the Committee in charge of the venereal diseases problem, the Department of Health reorganized the health card distribution system and the Communicable Diseases Division was entrusted with this work; the staff hired for this work was transferred to the above mentioned Division. Dr. C. A. Bourdon, Special Officer and Chief of the Health Districts, was temporarily designed to assume responsibilities for this reorganization and its functioning.

This new system of issuing a health card for all food handlers and other persons for whom it is deemed necessary, was adopted

and used by means of a cardwheel which assures a better distribution of said card.

The issuing of health cards is compulsory, and follows a medical examination, according to provincial and municipal By-laws. Laboratory examinations to detect typhosum germs carriers, by means of blood tests, analysis of stools and urines are required in the case of food handlers. In all cases we try to generalize the X-ray of the lungs and the blood-test for a Bordet-Wassermann. It is understood that all persons receiving a health card must be vaccinated against small-pox and re-vaccinated when necessary. To this end, in 1946, 29,922 health cards were issued, 1,300 people were vaccinated or re-vaccinated, 3,934 persons required the X-ray of the lungs; 2,637 blood-tests for Bordet-Wassermann were necessary; 2,495 samplings to detect gonorrhoea and 1,538 laboratory analyses (blood, stools and urines) were made to detect typhosum germ on milk handlers.

SMALL-POX AND VACCINATION

For the sixteenth consecutive year, not a single case of small-pox has been reported to the Department of Health. But, in spite of this long interval, the rapid transport of travellers coming from foreign countries where the disease is still existing, may bring small-pox among a population apparently well protected. This is why it is very important that vaccination of young children, starting when they are 3 to 6 months old, be done more frequently.

During 1946, 15,410 persons have been vaccinated; 14,728 of these vaccinations were done by physicians of this Department and 682 by local practitioners.

Of this total, 3,609 children of 0 to 4 years have been vaccinated, which shows an increase of 368 children, as compared with 1945.

It is particularly in the Maisonneuve Health District that education undertaken to this effect, sometimes ago, bears fruit, because 526 children have been protected before they reached 1 year and 1,028 between 0 to 4 years. Among children of 5 and 6 years, 8,278 vaccinations have been performed, an increase of 430 over the preceding year.

Table XIV that follows shows, by age and by year, for the last ten-year period, 1937-1946, the number of persons that have been vaccinated against small-pox, which number totalled 212,521, distributed by different age-group, as indicated to the right of same table.

Table XIV
Vaccination against small-pox
Age of children vaccinated
1937-1946

Ages	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	Total number of children	
											Vaccinated to date, according to ages	At age when vaccinated
Under 1 year...	381	351	279	553	525	546	547	475	733	1,159	1946 0-4 years pop. 93,751	5,549 0-4 years
1 year.....	259	253	243	317	339	274	424	470	350	296	8,460	3,225
2 years.....	336	240	206	320	313	347	483	375	373	367	9.0%	3,360 26,848
3 years.....	578	319	326	437	495	506	696	590	558	621	5-9 years pop. 81,061	5,126
4 years.....	1,162	561	498	754	871	989	1,405	955	1,227	1,166	7 years or over 102,137	9,588 48.1%
5 years.....	3,085	1,628	1,464	2,735	2,630	3,651	4,338	3,833	3,888	3,521	10 yrs or over 149,725	30,773
6 years.....	7,016	4,216	4,081	6,466	6,170	5,846	4,611	4,399	4,410	5,548	212,521	52,763
7 years.....	1,423	807	1,005	1,801	1,394	1,342	962	793	772	816	212,521	11,115
8 years.....	266	153	214	416	370	285	238	172	187	146	212,521	2,397
9 years.....	117	68	103	156	184	152	123	124	135	68	212,521	1,230
10 years or over	9,038	5,308	6,477	13,825	11,888	11,114	9,104	10,287	8,652	1,702	212,521	87,395
Total.....	23,661	13,904	14,896	27,780	25,179	25,002	22,931	22,473	21,285	15,410	212,521	212,521

DIPHTHERIA AND IMMUNIZATION

In 1946, there were 149 cases of diphtheria, compared to 190 cases in 1945; the number of deaths remains about the same: 22 deaths in 1946, compared to 23 deaths in 1945 and the mortality rate is set up to 2.2 per 100,000 population.

Table XV which follows, gives since 1927 the number of cases and deaths from diphtheria and the death rate per 100,000 population and shows that, after a marked decrease of the mortality due to this disease from 1927 to 1933, the mortality rates varied, since then, between 1.2 and 3.5 per 100,000 population.

These deaths occurred among non-immunized children and although there is no danger of epidemic, the disease is still existing at an endemic condition, because the number of children who might contract it is still too high.

Table XV

**Number of diphtheria cases and deaths and death rate per
100,000 population—1927-1946**

Years	Number of cases	Deaths	
		Number	Rate per 100,000 population
1927.....	1,826	219	29.9
1928.....	1,632	157	20.8
1929.....	1,254	115	14.8
1930.....	930	83	10.4
1931.....	706	71	8.7
1932.....	607	53	6.5
1933.....	297	18	2.1
1934.....	244	30	3.5
1935.....	183	21	2.4
1936.....	166	18	2.1
1937.....	249	26	2.9
1938.....	222	26	2.9
1939.....	143	19	2.1
1940.....	134	11	1.2
1941.....	193	31	3.4
1942.....	212	26	2.8
1943.....	158	27	2.8
1944.....	189	27	2.8
1945.....	190	23	2.3
1946.....	149	22	2.2

The last quarter of 1945 and the first of 1946 having shown a transient increase in the number of cases and deaths from diphtheria, an intensive campaign in favour of immunization has been undertaken by the Department of Health.

Letters have been sent to pastors of Montréal, asking them to insist, from the pulpit, that parents have their children immunized without delay, against diphtheria and whooping-cough. Facsimile of the letter sent to the pastors is hereafter published.

CITY OF MONTRÉAL

DEPARTMENT OF HEALTH—OFFICE OF THE DIRECTOR

Montréal 1, May 9, 1946.

Reverend Father (or Dear Sir):

Realizing the deep interest you have always shown concerning the good state of health, physical as well as moral, of your parishioners (or the members of your congregation) and the protection of young children, I believe it a duty to put before you the actual situation of diphtheria in Montréal.

Statistics indicate an increase of cases in the last six months. During this period, 105 were registered in the city.

I would ask that you kindly impress upon your parishioners (or the members of your congregation) the necessity of having all their children immunized at once and, in the future, all children who reach the age of six months.

The combined vaccine used by the Department of Health and supplied free of charge, upon request, to the official and voluntary Well-Baby clinics, the Immunization Bureau and physicians, protects against both diphtheria and whooping-cough. The inoculation process is very simple: it consists of three injections at intervals of one month; of one reinforcing dose one year after this first series, and of a second reinforcing dose immediately before the child starts going to school.

It is of capital importance that the vaccine be administered between the ages of six months and one year—it is a mistake to wait until school age—diphtheria and whooping-cough being most frequently observed between the ages of one and five.

The parents who cannot consult a physician may apply to the Health Centre located at . . . Street, where children are vaccinated every . . ., from 3 to 5 o'clock p.m.


I think it is my duty, Reverend Father, in the interest of our children, to appeal, once more, to your usual kindness.

I wish to thank you most sincerely, Reverend Father, for the fine co-operation you have given us in the past and remain,

Respectfully yours,

(Signed) Dr. Ad. Groulx,
Director, Department of Health.

Moreover, a circular was sent to the taxpayers with their statement, recalling them the necessity of protecting their children against those two diseases.

<p>LE VACCIN COMBINÉ protège contre</p> <p>LA DIPHTÉRIE ET LA COQUELUCHE</p> <hr/> <p>FAITES IMMUNISER TOUS VOS ENFANTS DÈS L'ÂGE DE 6 MOIS</p> <p>N'attendez pas car les enfants âgés de 1 à 10 ans sont plus exposés à contracter ces maladies</p> <hr/> <p>TOUTE ATTENTE PEUT ÊTRE FATALE Conduisez vos enfants chez votre MÉDECIN ou dans une CONSULTATION DE NOURRISSONS ET PRÉSCOLAIRE</p> <hr/> <p>LE SERVICE DE SANTÉ VILLE DE MONTRÉAL</p>		<p>THE COMBINED VACCINE protects against</p> <p>DIPHTHERIA and WHOOPING-COUGH</p> <hr/> <p>HAVE ALL YOUR CHILDREN IMMUNIZED AS SOON AS THEY ARE 6 MONTHS OLD</p> <p>Do not delay any longer as children from 1 to 10 years of age are more susceptible to these diseases</p> <hr/> <p>ANY DELAY MAY BE FATAL Take your children to your PHYSICIAN or bring them to a WELL-BABY AND PRESCHOOL CLINIC</p> <hr/> <p>DEPARTMENT OF HEALTH CITY OF MONTRÉAL</p>
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During 1946, 16,563 children were immunized against diphtheria; 12,245 by the doctors of the Department, in the 56 municipal clinics and in schools and 4,318 by the following organizations: 2,371 in 19 branches of the "Gouttes de lait paroissiales"; 651 in the 8 centres of the "Child Welfare Association"; 189 in foundling homes and institutions and 1,107 by private practitioners.

Table XVI
Immunization against diphtheria
1928-1946

Years	Depart- ment of Health	Other organizations				Total
		Gouttes de lait paroissiales (19 clinics)	Child Welfare Association (8 clinics)	Infants' Homes and other	Doctors	
1928.....	384	.....	1,083	.....	.....	1,467
1929.....	3,585	.....	754	.....	.....	4,339
1930.....	9,108	745	1,138	379	.....	11,370
1931.....	10,064	741	1,135	269	.....	12,209
1932.....	11,499	1,375	977	954	.....	14,805
1933.....	41,490	3,313	2,186	690	1,017	48,696
1934.....	11,484	1,206	1,257	153	219	14,319
1935.....	12,477	1,283	1,118	191	306	15,375
1936.....	12,017	1,666	757	317	284	15,041
1937.....	12,935	1,726	652	398	288	15,999
1938.....	10,473	1,799	757	442	284	13,755
1939.....	10,112	1,332	1,084	439	507	13,474
1940.....	10,137	1,991	890	401	434	13,853
1941.....	16,066	3,493	1,092	433	1,054	22,138
1942.....	12,769	3,694	757	394	1,248	18,862
1943.....	12,500	4,078	470	317	1,274	18,639
1944.....	9,987	2,810	635	243	1,041	14,716
1945.....	8,465	2,671	815	448	993	13,392
1946.....	12,245	2,371	651	189	1,107	16,563
Total.....	227,797	36,294	18,208	6,657	10,056	299,012

Combined toxoid and immunization against whooping-cough

Since September 1944, the Department of Health has used the combined vaccine for immunization against diphtheria and whooping-cough and placed it at the disposal of doctors, institutions and social service organizations.

During 1946, 19,376 children have received the three doses of vaccine against whooping-cough. Of this total, 15,843 were immunized by doctors of the Department of Health and 3,533 in the following organizations: 2,348 in the 19 branches of the "Gouttes de lait paroissiales", 365 in the 8 clinics of the "Child Welfare Association", 175 in foundling homes and institutions and 645 by private doctors.

The following tables show the results of immunization in Montréal from 1928 onward and demonstrate that 299,012 children have been immunized against diphtheria and that since September 1944, 52,269 children have been inoculated against whooping-cough.

Table XVII
Immunization against whooping-cough
(September 1944 to December 31st, 1946)

Years	Depart- ment of Health	Other organizations					Total
		Gouttes de lait paroissiales (19 clinics)	Child Welfare Association (8 clinics)	Infants' Homes and other	Doctors	Total	
1944.....	11,467	2,269	33	44	150	2,496	13,963
1945.....	13,697	3,468	703	523	539	5,233	18,930
1946.....	15,843	2,348	365	175	645	3,533	19,376
Total.....	41,007	8,085	1,101	742	1,334	11,262	52,269

Table XVIII

Immunization against diphtheria

Age of children who received 3 doses of Ramon anatoxin (toxoid) from
September 1928 to 1946 inclusively

Ages	1928 to 1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	Total number of children	
												Immunized to date by ages	Age at which they were immunized
6 months-1 year....	11,960	3,589	4,040	4,662	5,055	6,481	7,039	10,197	8,269	7,249	9,801	1946	78,342 6 months to 5 years
1 year.....	14,483	1,980	1,794	1,739	1,894	2,680	2,690	2,614	2,005	1,877	1,787	0 to 4 years	35,543
2 years.....	11,867	1,332	1,038	958	889	2,094	1,514	1,060	1,011	932	1,046	pop. 93,751	23,741 190,811
3 years.....	9,962	1,039	889	692	489	1,705	1,207	765	537	569	732	55,652	18,586
4 years.....	9,372	864	598	616	425	1,476	1,046	637	429	424	524	59.4%	16,411 63.8%
5 years.....	10,463	910	685	580	583	1,567	1,182	828	474	398	518	5 to 9 years	18,188
6 years.....	23,584	3,227	2,581	2,371	2,357	2,829	1,895	1,219	916	874	1,149	pop. 81,061	43,002 6 and 7 years 72,146
7 years.....	18,489	1,862	1,349	1,237	1,306	1,545	1,111	711	458	510	556	59,598	29,144 24.1%
8 years.....	10,027	738	537	413	516	808	593	348	294	264	278	73.5%	14,816
9 years.....	7,552	323	184	119	217	514	375	188	167	151	120		9,910 36,055
10 years and over....	8,830	78	60	42	122	233	142	72	156	144	52		9,931 12.1%
Age unknown.....	1,022	57	..	45	..	206	68	..	..	..	..		1,398
Total.....	137,621	15,999	13,755	13,474	13,853	22,138	18,662	18,639	14,716	13,392	16,563	299,012	299,012

Table XIX

Immunization against whooping-cough

Age of children who received 3 doses of vaccine from September 1944 to 1946
(inclusively)

Ages	1944	1945	1946	Total number of children	
				Immunized to date by ages	Age at which they were immunized
6 months to 1 year	3,040	6,643	9,199	1946	18,882
1 year.....	2,136	2,170	1,749	0 to 4 years	6,055
2 years.....	1,666	1,787	1,235	pop. 93,751	4,688
3 years.....	1,089	1,442	1,191	33,201	3,722
4 years.....	857	1,163	943	35.4%	39,395
5 years.....	890	1,172	1,023	5 to 9 years	2,963
6 years.....	1,666	2,011	2,220	pop. 81,061	3,085
7 years.....	1,169	1,231	980	16,997	5,897
8 years.....	847	755	538	21.0%	3,380
9 years.....	454	386	233		2,140
10 years or over...	149	170	65	2,071	1,073
Age unknown....	.....	....	....		384
Total.....	13,963	18,930	19,376	52,269	52,269
					6 months to 5 years
					39,395
					75.4%
					6 and 7 years
					9,277
					17.7%
					3,597
					6.9%

THE TUBERCULOSIS SITUATION

The death rate from tuberculosis, all forms, in 1946, was 65.3 per 100,000 population, compared with 62.2 in 1945. The total number of deaths was, in 1946, of 658, compared to 613 for the preceding year, an increase of 45 deaths or 3.1 per 100,000 population.

The number of reported cases of tuberculosis in 1946 was 2,852, of which 2,679 cases were pulmonary tuberculosis and 173 cases of non-pulmonary tuberculosis. The death rate for pulmonary tuberculosis is 56.9 per 100,000 population, while the rate for non-pulmonary tuberculosis is 8.4 per 100,000 population.

The following table shows the number of deaths and the mortality rate per 100,000 population, for five-year periods since 1915 and yearly since 1945, for tuberculosis, all forms and for pulmonary tuberculosis and other forms.

Table XX

**Deaths from tuberculosis, pulmonary and other forms,
death rate per 100,000 population for 5-year periods, 1915-1946
and yearly from 1940-1946**

5-year periods	Number of deaths			Rate per 100,000 pop.		
	Tuberculosis		Total	Tuberculosis		Total
	Pulmonary	Other forms		Pulmonary	Other forms	
1915-1919	904	208	1,112	161.9	37.3	199.2
1920-1924	807	178	985	126.2	27.8	154.0
1925-1929	798	148	946	108.1	20.0	128.1
1930-1934	713	133	846	86.5	16.1	102.6
1935-1939	583	101	684	67.1	11.6	78.7
1940-1944	569	86	655	61.2	9.3	70.5
1945	535	78	613	54.3	7.9	62.2
1946	573	85	658	56.9	8.4	65.3

During 1946, the nine nurses attached to this Section made 4,979 visits to the homes; 4,414 Vollmer tuberculin tests were made among children in baby and pre-school clinics (municipal).

At the Central Record File, 2,852 confirmed cases of tuberculosis all forms have been registered.

At the Laurier Municipal X-ray Clinic, 27,627 pulmonary X-rays were taken in 1946; the figures were 23,349 in 1945, which is a favorable increase for 1946, of 4,278. Of this number, 21,538 were made at the request of private physicians. Last year, at the request of practitioners, 19,037 X-rays were taken, which means an increase of 2,501 for 1946.

In 1946, we began to perform gastric lavage and sedimentation tests among patients who do not expectorate, in order to make a precise diagnosis of the lesions noted on the radiographic films and in order to better direct the tubercular patient. This work is accomplished with the co-operation of the personnel of the laboratories of the Department of Health.

The Montréal Anti-Tuberculosis League Inc., continued an intensive campaign of detection of this malady in industries and its staff radiographed, in 1946, 109,739 persons, totalling 300,104 since June 1943. It is in the vanguard of the defense army.

The total number of pulmonary radiographs and radiosopes, taking at around 10,000 those taken in general hospitals and private doctors' office, reaches 198,111 for 1946, as follows:

Municipal radiology clinic	27,627
Bruchési Institute (including 8,573 radiosopes)	25,481
Royal Edward Institute	21,638
Sacred Heart Hospital out-door clinic (including 1,496 radiosopes)	3,626
Anti-Tuberculosis League of Montréal Inc.	109,739
Hospitals and doctors (approximate)	10,000

The work of these anti-tuberculosis organizations, to which must be added the Sacred Heart Hospital, the Grace Dart Home, the B.C.G. Clinic, and other similar institutions, contributes to the improvement of the tuberculosis problem which will only be definitively solved when we will have all the equipment and sanatorium beds we require. Since the inauguration of the B.C.G.

Clinic, in August 1935, 913 babies of tubercular parents or of families where there is a tuberculous contact, have been vaccinated and revaccinated regularly.

The City's share for the 1946-1947 fiscal year in the contribution towards the fight against tuberculosis reached \$375,973.65, as follows:

I—Department of Health	\$ 87,973.65
1. Section of Tuberculosis	\$ 39,973.65
2. Grants	48,000.00
(a) Bruchési Institute	\$25,000
(b) Bruchési Camps	4,000
(c) Royal Edward Institute	13,500
(d) Greenfield Memorial Camp	2,000
(e) Sacred Heart Hospital (out-door clinic)	1,500
(f) Anti-Tuberculosis League of Montréal Inc.—'Xmas seals	2,000
II—Social Welfare Department	
(cost of hospitalizing tuberculous patients)	288,000.00
GRAND TOTAL	\$375,973.65

VENEREAL DISEASES

1946

The number of cases of syphilis reported this year in Montréal is higher: 3,578 cases in 1946, compared with 3,379 in 1945; those of gonorrhoea are also higher: 4,173 cases in 1946 against 3,003 in 1945. Our Division of Vital Statistics reported to the Ministry of Health 134 deaths attributable to syphilis.

The highlights of the campaign against venereal diseases in 1946, could be summarized as follows:

1° The opening and beginning of the operations, under the temporary direction of Dr. C. A. Bourdon, of the new Division of Venereal Diseases, the appointment of its first personnel: a public health nurse, a stenographer-clerk and the transfer to this Division of a physician, Dr. F. Dussault, after his discharge from the Army. The nurse of this Division made 333 home visits and interviewed 294 patients.

2° The serological examination systematically performed upon all men found in bawdy houses, according to a recommendation of the Committee appointed in 1945, to study the question of venereal diseases.

3° A draft By-law concerning rooming houses has been submitted to the City.

4° The educational campaign was continued in 1946 with the organization of 32 public meetings with lectures and films on venereal diseases. The attendance at these meetings was nearly 10,000.

5° Detection of cases: during 1946, 5,405 blood tests were performed to detect syphilis and 3,775 smears were taken to find gonorrhoea cases.

6° 788 cases of venereal infection were submitted to the attention of the Division of Venereal Diseases, from the following sources: the health card section, the Provincial Department of Health, the Army, the Navy and by reports or from complaints.

DIVISION OF CHILD HYGIENE

Maternal and Infant Hygiene

In 1946, there were 26,635 confinements; of this number, 8,630 mothers, or 32.4% were registered in the various municipal or hospital pre-natal clinics.

In the Montréal hospitals and maternities there are 3,411 available beds for obstetrical cases of which 3,112 are private and 299 are public. Of the 26,635 confinements, 20,905 were made in hospitals, or 78.5% and 5,730, or 21.5% in the homes. Moreover,

5,014, or 18.8%, were public cases, of which 4,152 were cared for under the Québec Public Charities Act and 862 were conducted at home by doctors of l'Assistance maternelle.

There are 6 municipal pre-natal clinics. In these clinics—educational centres to direct mothers-to-be—485 mothers, of which 127 inscribed in 1945, were registered and followed up during 1946. The nurses of the Department continue this year to give lectures to pregnant women.

The educational programme carried on in Montréal for many years, amongst the mothers, in 84 clinics, of which 56 are municipal, 19 by the “Gouttes de lait paroissiales” and 9 by the “Child Welfare Association”, through visits to homes by nurses and the distribution of pamphlets, circulars, etc., has had the effect of reducing deaths among children under one year of age, the rate of which per 1,000 births was 49.2 in 1946, compared to 61.2 in 1945.

Reports from these different organizations show that 21,430 infants and 21,194 children under five years of age were registered and followed by medical care; 185,754 consultations were given to mothers by doctors and 69,065 visits were made by nurses to the homes.

During July and August, the two baby clinics at Lafontaine Park and Ste-Hélène Island were opened and gave 678 emergency dressings, 1,456 vaccinations or re-vaccinations and examined 46 children entering school for the first time.

The Department continued to exercise assiduous supervision over 23 children's boarding houses (4 of which were subsequently closed) and 19 private hospitals (1 of which was subsequently closed) operating under City Licence. The two nurses specially charged with this work made 3,446 visits and investigations.

Medical Inspection in Schools

During 1945-1946 school year, the physicians and nurses of the Child Hygiene Division performed the medical inspection in 320 schools, 218 of the Montréal Catholic School Commission, 46 of the Protestant Board of School Commissioners and 56 private schools, attended by 135,320 pupils.

Our doctors made 7,249 visits in schools; 63,837 (47.2%) pupils were given a periodical examination, of whom 26,713 (41.8%) showed physical defects. Parents assisted at the examination of 4,442. This consists in a complete medical examination at definite times. Moreover, 13,367 special cases were referred to doctors.

Among important physical defects discovered were noted: lymphatic system, 8,731 or 13.7% of all pupils examined; enlarged tonsils, 7,719, or 12.1%; undernourishment, 5,872, or 9.2%; defective vision, 4,514, or 7.1%; nasal obstruction, 3,642, or 5.7%.

Our nurses made 34,381 visits in schools. During their visits in classes they performed 591,754 examinations; this means that each pupil has been examined by a nurse an average of 4.3 times during the school year, for uncleanliness, pediculosis, skin trouble, apparent defects, etc.

Re-examination at the end of the school-year of 16,332 pupils with defects showed that 5,741 had been cared for and cured while 1,939 were under treatment, making a total of 7,680, or 47.0% whose defects were corrected. Let us note here that 1,863 children with enlarged tonsils and 1,130 with adenoids were operated upon; 2,394 with poor sight were given glasses, many of which were furnished free of charge by hospitals or associations.

A series of five courses in First Aid was given by our doctors and nurses in 81 schools of the Catholic Commission; 2,387 candidates passed the examination successfully. Moreover, 252 officers and juniors of the Police Department have passed their examination under the supervision of the physicians attached to the Child Hygiene Division.

In the City clinics and schools, our doctors have immunized, in 1946, 12,245 children against diphtheria, 15,843 against whooping-cough and have vaccinated 13,452 against small-pox; 3,193 had tuberculin test.

Mental Hygiene

Following preliminary detection by the teaching staff in 64 schools, 4,029 pupils were given the Binet-Simon mental test. This specialized test is for the purpose of finding the children whose I.Q. demonstrates backwardness and who should be placed in special classes.

At the Laurier Mental Clinic, 597 pupils were examined, of whom 84 had been referred by the Juvenile Court. These cases required 373 investigations by the nurses entrusted with this work.

Medical Examination of Teachers

During the 1945-1946 school year, there were 5,284 teachers and employees in Montréal schools of whom 4,913 were principals, teachers, religious and laymen, male and female. Of this number, 4,417 were examined by doctors of the Department of Health and 867 by their own physician.

Among the principal defects found, we note: defective vision, with or without correction, in 4,342, or 82.2%; digestive tract diseases or trouble among 325, or 6.2%; heart diseases in 187, or 3.5%; dental defects in 245, or 4.6%; diseases of the liver in 146, or 2.8%; defective hearing, 211, or 4.0%; diseases of the nervous system in 66, or 1.2%; diseases of the kidneys—albuminuria, 184, or 3.5%; sugar, 31, or 0.6%; diseases of the lungs (exclusive of tuberculosis), 81 cases, or 1.5%.

Concerning the detection of tuberculosis in this class of employees, 662 cases were referred for an X-ray examination: 10 had slight lesions; 1, moderately advanced lesions; 31 were kept under supervision.

Vacation Camps

During July and August 1946, the doctors and nurses made the medical examination of 3,837 children before they left for summer camps: "Les Grèves", "La Colonie Ste-Jeanne-d'Arc", "Le Camp Le Grillon", Boy Scout Camps, etc. The aim of this examination is to eliminate communicable and parasitic diseases and to control vaccination.

THE NURSES

There were, in 1946, 172 nurses in the Department, 154 of whom are engaged in child hygiene and health district work. Eleven are in the communicable diseases division, of whom 9 are working in the section of tuberculosis, 2 are in the medical control division, 1 is in the venereal diseases division, and 3 are following post-graduate studies as holders of City scholarships.

In 1946, the several reports show that they made 127,356 visits to the homes as follows:

a. control of communicable diseases (including tuberculosis)	20,636
b. school duties	48,064
c. pre-natal and baby clinics	48,818
d. special visits and investigations	3,819
e. visits for adults	6,019

In schools, in addition to assisting the doctor, the nurses carry out systematically the examination of pupils in classes; in 1945-46, they made 591,754 such examinations. To this, must be added the work of the special examinations I already mentioned.

DENTAL HYGIENE

The staff of the section of dental hygiene, which has been increased of two dentists, one full-time and one part-time, brings the number of dentists to 15, including 1 head of section, 1 dentist specialized in orthodontia, 9 full-time dentists, 4 part-time dentists, 10 nurses and 1 technician in oral prothesis, has continued to perform its examination work in the schools during the school year 1945-46 and in dental clinics during 1946. The municipal orthodontia clinic has continued to render great services in 1946.

Joint Nutrition and Oral Health Campaign in Schools

The staff of the section of dental hygiene continued in 1945-46 the joint nutrition and oral health campaign inaugurated in schools with the co-operation of the League of Dental Hygiene of the Province of Québec Inc.

In the 320 schools visited, 65,417 children were examined; 63,711 pupils attended the 1,770 meetings which followed the examination of their teeth. In each of these meetings, two lectures are delivered, one on nutrition, by the school doctor and one on dental care by a guest dentist, followed by educational films. The examination of pupils showed that 47,710 had decayed teeth, or a proportion of 72.9%.

Municipal Dental Clinics and the Orthodontia Clinic

In the 9 municipal dental clinics (including the Griffintown Club Clinic), 15,184 children were registered and received 30,008 treatments; 21,745 teeth were extracted and 5,116 fillings were made.

In the municipal orthodontia clinic, located in the offices of the Dental Faculty of the Université de Montréal, 173 children were examined; 106 were treated for facial deformation and dental irregularities.

New Dental Clinics

During the year 1946, the Department of Health renewed the dental installation of the Maisonneuve Health Centre with the most modern equipment; a new municipal dental clinic was opened at the deLorimier Health Centre (Mount Royal Avenue, corner of Fullum) and another will be soon completed at the Municipal Clinic of Park Extension. Following the example of the male Institution for the Deaf and Dumb, the authorities of a similar institution for women organized and equipped a dental clinic, the operation of which is assured by the personnel of our Dental Hygiene Section.

NUTRITION

The contest on proper nutrition in which 35,000 school children participated was organized in 1945 in the schools and continued during 1946 when it was ended by a meeting and a distribution of prizes given by the Department of Health and by the "Bureau des Oeuvres Sociales Scolaires"; the latter also furnished drawing sheets to be colored (menus), etc.

With the co-operation of the Directress of the Domestic Sciences of the Catholic School Board of Montréal, a campaign for the conservation of food was undertaken in the classes of Domestic Sciences in September 1946.

The nutritionist of the Department of Health continued during 1946 her lectures to nurses in the Health Districts and to mothers in Municipal Pre-Natal and Well-Baby Clinics, in parishes and in domestic schools. She delivered 33 courses and made 30 special investigations in schools, institutions, etc.

She also delivered 20 courses in nutrition, in co-operation with the "École supérieure de pédagogie familiale", of Outremont.

The nutrition section has also contributed to the preparation and the drawing-up, in French and in English, of the 1942-1945 report of the nutrition campaign in Montréal.

DIVISION OF FOOD INSPECTION

During 1946, 126,560 gallons of milk, cream or ice cream were consumed daily, in Montréal, of which 113,623 was milk, compared to 111,200, in 1945, an increase of 2,423 gallons per day. This daily consumption is divided as follows: 112,363 gallons of pasteurized milk, or 98.89% of the total, and 1,260 gallons of special (raw) milk, or 1.11% of all the milk sold.

There were 5,198 farms supplying milk and kept under supervision, which required 16,511 inspections by the veterinarians of the Department of Health.

There were 34 pasteurizing establishments and 20 raw milk stations, 54 in all, which required 5,384 inspections. There were 6,461 other places where milk is handled which were visited: groceries, hotels, restaurants, dining rooms, etc. In addition to railway stations and milk depots, 1,371 wagons and trucks were kept under supervision.

These inspections were completed by the collecting of samples of milk and its by-products, totalling 15,730 for bacteriological and chemical analyses, and 122,251 other examinations for lacto-sedimentation, temperature, organoleptic tests, etc.

The average butter fat of milk sold in Montréal was 3.454% and the density 1.0295.

There were 29,289 inspections made in 1,602 establishments including markets, butcher shops, fish stalls, packing plants and abattoirs; 154,425 carcasses were inspected in meat inspection stations, abattoirs, public markets and wholesale stores; 349 carcasses and 168,423 pounds of meat of all kinds were confiscated; 841 bacteriological, physical and chemical analyses were made. Eggs to the number of 75,744 were candled, of which 335 were rejected.

Moreover, there are in Montréal 6,053 other establishments: bakeries, restaurants, dining rooms, groceries, food establishments and 1,118 delivery vehicles which requested, in 1946, 43,359 inspections. A total of 383,236 pounds of fruits, vegetables and other food-stuffs was condemned.

In 1946, 291 actions were taken to Court and 26,088 notices were sent out.

Many improvements were obtained in the various food establishments under the supervision of the Department of Health, dairies, bakeries, restaurants, dining rooms, etc., through the possibility of securing utensils and the necessary apparatus which were scarce for many years.

During 1946, the quality of meat has largely improved if we judge by the decrease in the amount of meats condemned, about 30,000 fewer pounds in the various establishments.

A few dairies formerly distributing "special" milk (raw) are now selling pasteurized milk.

DIVISION OF SANITARY INSPECTION

Operations of the Division of Sanitary Inspection were greatly hindered during the year 1946 due to the scarcity of materials and lack of specialized labor. Many unsanitary conditions could not be corrected as fast as it would have been desired, those responsible being unable to secure the necessary material to that effect. It was even found necessary in some instances to ease the requirements of our sanitary By-laws due to this inevitable condition.

I must emphasize, however, that these inconveniences were most felt and more serious in housing conditions. In fact, we have discovered 1,118 unsanitary dwellings, where it was impossible for landlords to make the necessary repairs, these buildings having not been erected to serve for dwelling purposes (sheds, warehouses, stores, etc.); others were so old that they would have to be demolished. These figures, however, represent only known cases resulting from the inspector's visits.

The Division of Sanitary Inspection undertook during the summer of 1946, in co-operation with the Department of Public Works, the task of destroying noxious weeds, poison ivy, ragweed, parsnip, etc., on vacant lots owned by the City of Montréal. Several chemical products were utilized, 2,4-D, chlorate of sodium, etc., and the results obtained were most satisfactory.

To assure the general sanitation of the City, more than 167,240 visits were made in 1946. Inspection of dwellings, totalling 65,405 showed that there were defects in 19,179 premises; 6,389 were found to be filthy.

No building may be erected or altered without a city permit and, in 1946, 6,039 were issued.

There were 3,753 plumbing permits issued and our inspectors made 6,652 smoke, air or water tests of piping.

Control visits were regularly made in children's boarding homes, hospitals, public buildings, stores of all kinds, theatres, public halls, educational establishments, laundries, barber and hairdressing shops, upholstering plants, massage parlors, funeral directors' premises. There were 25,895 inspections made in these places, of which 3,943 were found defective or in contravention with By-laws and 5,159 were found filthy or with deficiencies.

Free spaces, vacant lots, lanes, yards, etc., required 35,887 inspections to discover nuisances; 32,873 visits were made to look for noxious weeds.

According to By-law No. 1275, all fumigation with cyanogen was supervised and no accidents were reported in 1946 from any of the 7 fumigations.

The control over public baths required 868 inspections and the taking of 490 water samples.

Licences totalling 3,985 were granted and 20,651 notices were sent out.

The Division of Sanitary Inspection also took an active part in numerous public campaigns and distributed thousands of pamphlets, circulars, cards, asking the public to practise cleanliness inside and outside their homes, and showing how vermin and weeds may be eliminated.

DIVISION OF LABORATORIES

The number of chemical and bacteriological analyses, in 1946, has decreased; there have been 81,757 analyses in 1946, as compared to 85,772, in 1945, a decrease of 4,015 analyses. These analyses are distributed as follows:

Milk, cream and by-products	27,275
Solid food: meat, preserves, etc.	1,652
Water: (a) aqueduct	742
(b) public baths	1,419
(c) dish water in restaurants, apparatus, and receptacles in dairies	2,138
Sputum, re: tubercle bacilli and pneumococcus	7,648
Blood tests for the serodiagnosis of syphilis	3,401
Blood, stool and urine, re: B. typhosum and paraty- phosum A and B	4,958
Blood: chemical and cytological analyses	3,971
Throat swabs, re: diphtheria, Vincent's angina, etc.	6,149
Urethral and vaginal swabs, re: Gonococcus	5,024
Urine (chemical analysis)	14,286
Miscellaneous analyses	3,094

In order to co-operate in the special work undertaken by the Section of Tuberculosis, the Laboratory began, in 1946, the culture with sputum and gastric lavage to find the tubercle bacilli among certain patients. 328 cultures of this kind have been made for this work.

DIVISION OF MEDICAL CONTROL

During 1946, the examining and visiting doctors visited at home or examined in the office of the division all civic employees reported sick, which requested 5,747 examinations and reports.

In the medico-legal section the doctor in charge examined 1,793 victims of accidents while at work and made 1,070 reports. The preparation of expert evidence for the Law Department

required 432 examinations and 442 reports. There were 1,495 examinations made for the Pension Fund of the municipal employees, the Fire and Police Departments, applicants for work or superannuation.

The periodic medical examination of municipal employees was inaugurated in 1946 and the doctors of this division made 761 of these examinations. The 9,000 employees of the City were X-rayed by the Anti-Tuberculosis League of Montréal, Inc.

DIVISION OF VITAL STATISTICS

During the year 1946, we began sending to Québec vital statistical reports, twice instead of once a month, in order to accelerate their publication by means of a microfilming process.

Several meetings and attempts took place in Québec and Montréal between the directors of the Department of Health of the principal cities of the Island of Montréal: Lachine, Outremont, Verdun, Westmount and the Vital Statisticians of the Province and Montréal, in order to establish a weekly exchange of vital statistics between each municipality.

To this end, the division of Vital Statistics of the Department of Health of the City of Montréal was used as a training centre by the personnel of the City of Westmount and will be used to the same end by the City of Outremont, which has adopted a similar system. This decentralization will reduce the amount of work done by the division of Vital statistics of Montréal, while insuring complete collection of the vital statistics (residents especially).

The planning of "social areas" is progressing, and the Department of Health has contributed to research organized by McGill University in order to establish these zones in Montréal by hiring temporarily the services of four students from the month of June to September.

For further details concerning the utility of "social areas", you may refer to a study presented by the demographer of the City, entitled "Social areas at the service of public health", page 238 of this report.

PUBLIC HEALTH EDUCATION

As public health is chiefly a question of education, the Department has taken great pains to spread this knowledge among the public and give them information on preventive medicine, throughout the year 1946.

Nearly every week, official communications from the Department and often signed articles from members of the staff have been sent to all local newspapers. These articles dealt with nearly every question of hygiene and have always been received by the press with the utmost courtesy. Due to this excellent co-operation we have been enabled to reach countless numbers of persons thus greatly aiding our work. I wish to emphasize the release of a short weekly communiqué to the newspapers under the heading "Le Service de santé parle à Montréal"—"The Department of Health Calling Montréal".

On behalf of the Department of Health, I take this opportunity of thanking the publishers, editors and their staffs for their considerate, generous and unceasing co-operation.

The radio stations have also rendered yeoman service on several occasions during the year and especially during the various campaigns. We wish to express to them our heartfelt gratitude.

The Department continued the publication of its Annual Report, the bimestrial Health Bulletin, etc.

I wish to draw attention to the preparation, prior to the end of 1946, of a Preliminary Annual Report by the Director, with short comments and some progressive annual statistics compiled by the division of demography.

As Director of the Department, I was several times called upon to speak, here and elsewhere, on preventive medicine and public health before social and service clubs, associations, study groups. Several other officials also spoke before various gatherings, and a series of lectures was given in a Montréal hospital. Films were of great assistance in the organization of public meetings.

Besides the joint campaign to promote proper nutrition and dental hygiene in schools, mentioned above, the Department of Health continued, in 1946, the public campaign undertaken against

venereal diseases. Moreover, the Department gave its co-operation to the "National Immunization Week", launched by the Health League of Canada. In co-operation with the Department of Public Works, the Department of Health undertook the task of destroying noxious weeds on vacant lots owned by the City of Montréal and it also gave its support to the "Société des jeunes naturalistes" in the campaign undertaken against ragweed.

Most of the hospitals send us, for a certain period of training, their student nurses. While visiting the offices they attend short lectures on the organization of our Department and are shown educational films on several of the main public health problems. The students at the schools of public health nurses of the Université de Montréal and McGill University also visit our municipal clinics and undergo a period of field work training in the different divisions.

I wish to mention the honour conferred upon the Director who received an invitation of the Canadian Government, to participate in the World Health Conference held in New York, during June and July 1946, under the auspices of the United Nations Organization, as one of the "medical advisors of the Canadian Delegation". In the Health Bulletin (Vol. 33, No. I, 1947), I have published a study concerning "The World Health Organization (W.H.O.)", established at the time of the conference.

HEALTH DISTRICTS

The epidemiological investigations for the following diseases: diphtheria, typhoid, paratyphoid A and B, meningococcal meningitis, poliomyelitis, were entrusted, after study, to the District Health Officers.

The clerical staff of the Health Centres in the Health Districts has been transferred to the Director's Office, section of the Health Districts.

During the year, the Department of Health took possession of the closed police station No. 19, situated at 2165 Mount-Royal Avenue East. This municipal building has been converted and renovated and is now occupied by the Health Centre of the de Lorimier Health District. It comprises, on the ground floor, the

well-baby and pre-natal clinics, a vaccination and immunization bureau and a dental clinic, which will be in operation permanently. The first floor is reserved for the headquarters of the district and for the business offices: the office of the District Health Officer, that of the head nurse and an office for the typist-stenographer. An office for the nurses on the second floor is reserved for the headquarters of the nursing section.

Concerning births and deaths statistics, in the different health districts and the work accomplished in each, I refer you to Dr. C. A. Bourdon's report, page 89 of this report.

THE STAFF

Promotions

Dr. **P. E. Hamelin**, Dr. **E. A. Blumenfeld** and Dr. **René Blain**, of the Child Hygiene Division, attended the School of Hygiene at the University of Toronto, where they obtained their D.P.H. They were then promoted public health doctors in the Department of Health.

Miss **E. Merleau**, special nurse, and Misses **G. Côté** and **G. Latour**, of the Child Hygiene Division, have obtained their diploma for public health nursing. The two aforementioned studied at McGill University; the other, at the Université de Montréal. These nurses were granted scholarships by the City of Montréal. Misses Côté and Latour were nominated public health nurses; Miss Merleau was already fulfilling a high post as special nurse.

Scholarships

During 1946, scholarships were granted by the Municipal Authorities to: Dr. **J. M. Filiatrault**, doctor of the Communicable Diseases Division, section of tuberculosis; Misses **B. M. LeRoux**, **C. Lessard** of the Child Hygiene Division and **G. Dallaire**, of the Communicable Diseases Division. Dr. Filiatrault studied at the University of Toronto, Misses LeRoux and Dallaire, at the School of Hygiene of the Université de Montréal and Miss Lessard, at the McGill University.

Dr. **René Maillé**, of the Child Hygiene Division, who was entitled to a scholarship as veteran, has been granted a holiday with pay, by the City, for the length of his course, in order to specialize himself in public health at the School of Hygiene of the Université de Montréal.

Mr. **Roméo Mondello**, engineer grade 3, at the Sanitary Inspection Division, has been granted a scholarship by the City to study sanitary engineering. He has studied at the Graduate School of Engineering of Harvard University.

Dr. **Gustave Charest**, of the Communicable Diseases Division, who had obtained his D.P.H. at the Toronto University, after he was granted a scholarship from the City, also benefited of a Rockefeller Foundation scholarship to specialize himself in epidemiology at the Johns Hopkins University, Baltimore, where he obtained his Master in Public Health; he also attended the Herman Kiefer Hospital, Detroit, an institution specialized in the treatment of communicable diseases.

Miss **Brigitte Laliberté**, assistant head nurse at the Child Hygiene Division, has been granted a scholarship by the Rockefeller Foundation to pursue her studies at the Columbia University of New York, to obtain her "Master of Arts" in nursing. In 1942-43 and 1943-44, the City had granted a two year scholarship to Miss Laliberté to study at the same University, where she was granted her Certificate of "Bachelor in Nursing".

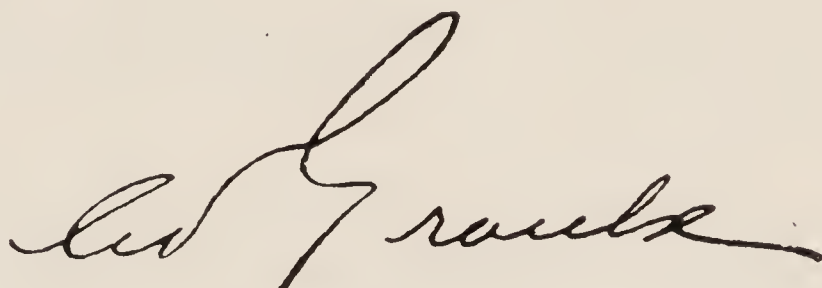
Certificate of Sanitary Inspection (C.S.I.)

Thirteen employees of the Department of Health have been successful in the last competition of the Canadian Public Health Association and were granted their Certificate in Sanitary Inspection (C.S.I. (C)).

They are: Messrs. J. G. Laberge, A. Lefebvre, M. Mercure, L. Paquin, J. V. Théorêt, M. A. Frenette, veterinary inspectors and Mr. G. Charron, sanitary inspector, all attached at the Food Inspection Division, and Messrs. J. E. I. Leduc, A. Dompierre, B. Ranger, R. Beaudoin, C. E. Bourgeault, sanitary inspectors and Mr. E. Leclerc, clerk at the Sanitary Inspection Division.

So are the main facts that I wanted to comment at a health point of view in Montréal.

I am grateful to all the official or benevolent organizations that have co-operated with us. I want to thank my devoted staff for its interest in the work undertaken by the Department of Health, this year, in order to safeguard the health of the people of the metropolis of Canada.

A handwritten signature in dark ink, appearing to read 'L. G. Frenette', written in a cursive style.

Director, Department of Health.

APPENDIX

THE POLIOMYELITIS SITUATION IN MONTRÉAL
DURING 1946

Poliomyelitis appeared in Montréal as **an epidemic** in 1946 from the middle of June to the end of October. This epidemic began with a few isolated cases in June, **climbed abruptly and rapidly** at the end of July and reached its peak in the second week of August with 99 cases, followed by a sudden fall to 70 the following week. A new spurt to 79 cases is seen in the fourth week of the same month, followed by a new decrease to 72 in the last week of August and, in the first weeks of September, we had a ceiling of 65 and 67 cases; since then the number of cases went down rapidly to 48, 28, 21 and 5 in the first week of October. Since, we registered a few cases, 6, 8 and 3 per week. In November and December there were only a few sporadic cases, 4 or 5.

The situation for the City of Montréal has been the following: 684 cases and 25 deaths, or a mortality rate of 2.5 per 100,000 population. This outbreak for Montréal, a City of 1,000,000 population (residents) gives one case per about 1,500 inhabitants and the proportion of deaths per 100 cases is below 4, as compared to 10 during the last epidemic in 1931. From 20 to 25% of patient developed permanent lesions. This would indicate a less severe progression of the disease. In 1931, there were 744 cases and 74 deaths attributable to this disease.

The Department of Health took all the recognized and necessary measures to control the situation, in conformity with a programme of "**Fight against poliomyelitis**" studied in 1942 and revised in 1946. (A copy has already been distributed to each member.) The Department secured the assistance of competent

advisers through the appointment of a Committee on Poliomyelitis; hospitals rendered and are still rendering invaluable services. The Press and the radio stations have devotedly accomplished their task. Nothing has been neglected to assure the safeguard of the population; in playgrounds and in the schools, a strict and continuous supervision was exercised by the combined action of the supervisors male and female, the teaching staff and the medical personnel of the Department of Health. The carefulness of parents has been a fine contribution and facilitated our work.

POLIOMYELITIS—1946

Summary of tables

Table 1—Distribution of local cases and deaths by date of onset.
1931 and 1946.

Table 2—Distribution by age groups.

Table 3—Distribution of cases by sex, nationality and by family.

Table 4—Distribution of cases and deaths by health districts.

Table 5—Distribution of cases and deaths by municipal wards.

Table 6—Hospitalization of local and outside cases in the hospitals.

Table 7—Distribution by districts of residence of the outside cases
hospitalized in Montréal.

Table I
Distribution of local cases and deaths by date of onset
June-August-September-October, etc. 1931 and 1946

Month and week of onset			1931		1946	
			Cases	Deaths	Cases	Deaths
May			1	1	1 (Jan.)	—
June	2	8	—	—	—	—
	9	15	—	—	2	—
	16	22	1	—	2	—
	23	29	—	—	1	—
Total			1	—	5	1
July	30 June	6 July	2	—	3	—
	7 July	13	2	—	5	—
	14	20	4	—	14	1
	21	27	4	—	29	2
Total			12	—	51	3
August	28 July	3 Aug.	7	1	54	3
	4 Aug.	10	13	—	99	3
	11	17	18	2	70	—
	18	24	31	—	79	—
	25	31	53	4	72	3
Total			122	7	374	9
September	1	7	54	2	65	1
	8	14	58	7	67	1
	15	21	54	7	48	3
	22	28	87	12	28	2
Total			253	28	208	7
October	29 Sept.	5 Oct.	107	7	21	—
	6 Oct.	12	84	12	5	—
	13	19	68	7	6	1
	20	26	30	4	8	2
Total			289	30	40	3
November	27 Oct.	2 Nov.	23	4	3	1
	3 Nov.	9	14	1	—	1
	10	16	8	1	—	—
	17	23	4	2	1	—
	24	30	5	—	—	—
Total			54	8	4	2
December	1	7	4	—	1	—
	8	14	6	1	—	—
	15	21	1	—	—	—
	22	28	1	—	—	—
Total			12	1	1	—
GRAND TOTAL			744	75	684	25

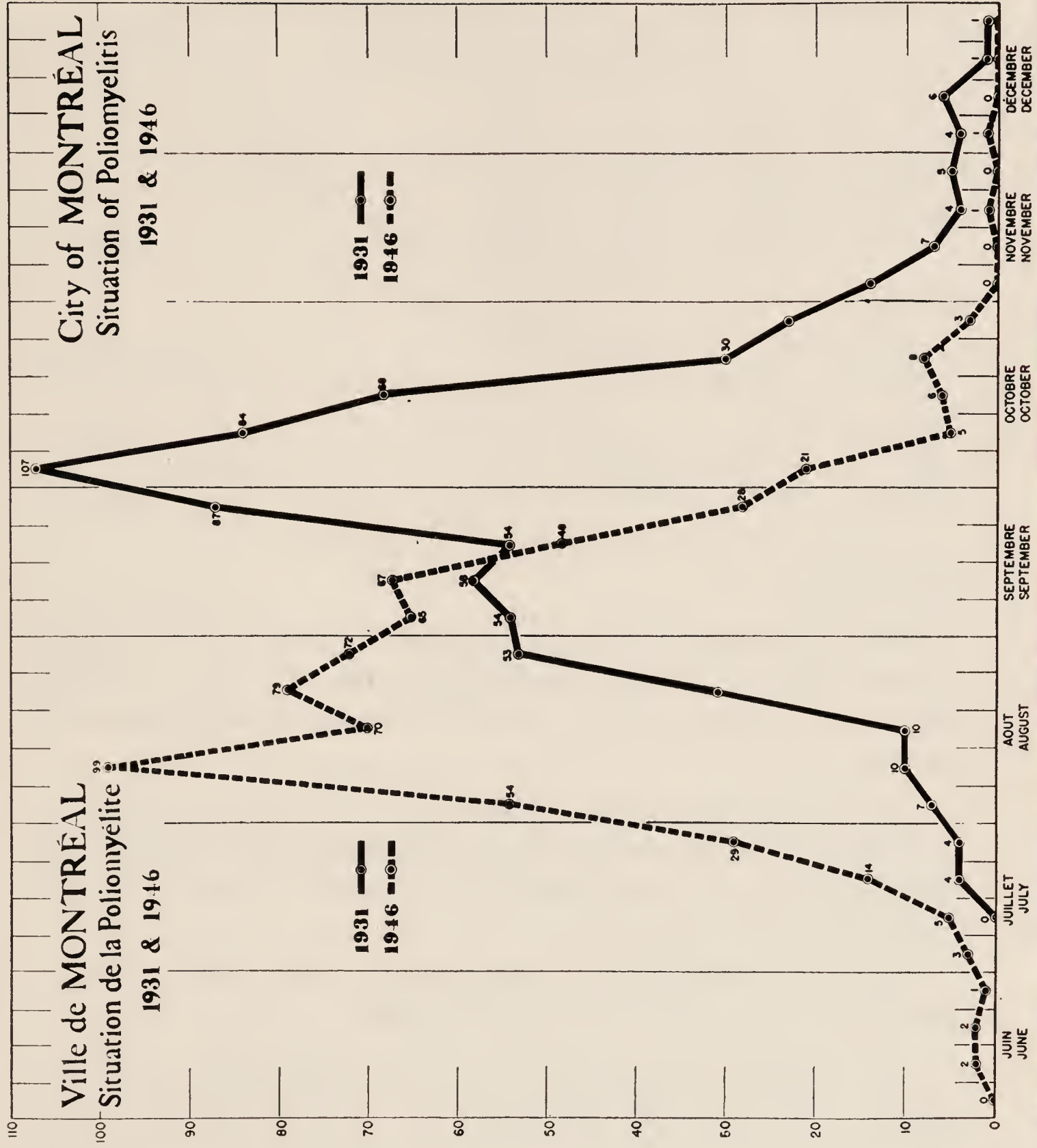


Table II

Distribution of cases by age groups

Age groups		Number of cases				
		% of total	0-4 yrs	0-9 yrs		0-14 yrs
0-1 yr	7	1.02	208		1-14 yrs	
1-4 yrs	201	29.39	30.41%	426	531	538
5-9 yrs	218	31.87	5-14 yrs	62.28%	77.61%	78.65%
10-14 yrs	112	16.37	330 48.24%	—		
15-19 yrs	67	9.80	—	—	—	15 yrs and over
20 yrs and over	79	11.55	—	—	—	146 21.34%
TOTAL	684	100.00	—	—	—	684

Comments

The distribution by age-groups of the 684 cases of poliomyelitis shows that the most affected group is that of children from 1 to 14 years of age, with 531 cases or 77.6% of the total cases.

21.34% of cases, or 146, have occurred in the age-group from 15 years and over, of this number 67 cases (9.8%) in the age-group from 15 to 19 years, and 79 cases (11.5%) among individuals of 20 years of age or over.

The least affected group is that of infants under one year of age, with 7 cases, or 1.02% of the total of cases.

Among the 1-14 age-group, it is the 5-9 year group, with 218 cases, or 31.8%, which has been most affected, followed by the 1-4 year group with 201 cases (29.4%) and the 10-14 year group with 112 cases or 16.4%.

As to the 25 deaths registered, 2 occurred in infants under one year of age, 12 among the 1-14 age-group and 11 among persons of 15 years of age and over. Mortality rate in the latter group is, due allowance being made, the highest.

Table III

Distribution: (a) by sex; (b) by nationality; (c) by family

a): Sex				
	1931	%	1946	%
Male	376	51.5	352	51.4
Female	354	48.5	332	48.6
Total	730	100.	684	100.

b): Nationality				
	1931	%	1946	%
French Canadians	531	72.7	513	75.
English Canadians	134	18.4	115	16.8
Jewish	41	5.6	20	2.9
Other nationalities	24	3.3	36	5.3
Total	730	100.	684	100.

c): by families			
1931	%(1)	1946	%(1)
1 case out of 576 families	90.	1 case out of 622 families	95.5
2 cases out of 50 families	7.8	2 cases out of 25 families	3.8
3 cases out of 13 families	2.	3 cases out of 4 families . . . . .	.7
4 cases out of 1 family	—		—
640 families		651 families	

(1) Percentage for number of families—This table is self explanatory.

Table IV

Distribution of cases and deaths by health districts

	Health Districts	Population — 1945	Cases		Deaths	
			Number	Rate per 100,000	Number	Rate per 100,000
1	Maisonneuve	113,394	115	101.4	6	5.3
2	North	129,866	131	100.9	5	3.8
3	Rosemont	112,115	82	73.1	2	1.8
4	St-Jacques	148,103	95	64.1	3	2.0
5	West (not org.)	103,682	65	62.7	3	2.1
6	N.D.G. (Mt. Royal)	124,753	71	56.9	1	0.8
7	De Lorimier	153,882	83	53.9	4	2.6
8	South Western	100,205	42	41.9	1	1.0
TOTAL		986,000	684	69.3	25	2.5

Comments

If we take into account the population (evaluated by districts for 1945) and the rate of morbidity for each, the distribution of cases of poliomyelitis shows that, by order of incident, the Maison-neuve, North and Rosemont Health Districts were most affected. They were followed by the St-Jacques Health District and the Western District (not yet organized and including St-Michel, St-André, St-Georges and St-Louis wards). The N.D.G. and deLorimier Health Districts are in 6th and 7th place. The South-Western district was the least affected (it includes St-Henri, Ste-Cunégonde, St-Joseph, Ste-Anne and St-Gabriel wards).

Table V

Distribution of cases and deaths by municipal wards

Municipal wards	Population (1945)	Number		Morbidity rate per 100,000
		Cases	Deaths	
Ahuntsic	23,630	37	1	156.6
Bourget	26,522	19	..	71.6
Crémazie	19,906	17	1	85.4
DeLorimier	49,838	37	..	74.2
Hochelaga	26,635	28	..	105.1
Lafontaine	11,291	6	..	53.4
Laurier	22,809	5	..	21.9
Maisonneuve	35,509	53	2	149.2
Mercier	25,835	20	2	77.4
Montcalm	23,658	19	1	80.3
Mont-Royal	25,446	14	1	55.0
Notre-Dame-de-Grâce	66,300	35	..	52.8
Papineau	18,162	5	..	27.5
Préfontaine	25,415	17	1	66.9
Rosemont	57,911	43	1	74.2
St-André	29,942	15	..	50.1
Ste-Anne	15,720	5	..	31.8
Ste-Cunégonde	19,760	5	..	25.3
St-Denis	25,515	12	..	47.0
St-Edouard	38,090	28	1	73.5
St-Eusèbe	24,015	24	3	99.9
St-Gabriel	22,628	8	1	35.4
St-Georges	16,285	1	..	6.1
St-Henri	31,556	18	..	57.0
St-Jacques	27,876	20	..	71.7
St-Jean	29,517	22	3	74.5
St-Jean-Baptiste	30,688	27	3	88.0
St-Joseph	10,541	4	..	37.9
St-Laurent	21,300	6	1	28.2
St-Louis	24,797	12	2	48.4
St-Michel	29,262	17	..	58.1
Ste-Marie	16,858	10	..	59.3
St-Paul	33,007	22	..	66.6
Ville-Marie	10,051	10	..	99.5
Villeray	69,725	63	1	90.4
Total	986,000	684	25	69.4

POLIOMYELITIS

Distribution of cases and deaths by municipal wards—1946

Comments

A—DISTRIBUTION PER MORBIDITY RATE

The distribution of cases of poliomyelitis and their rate (appearing in brackets) per 100,000 population in each municipal ward, is as follows:

- 1° The 18 following wards with a morbidity rate from 156.6 to 66.6 per 100,000 population are the most affected: Ahuntsic (156.6); Maisonneuve (149.2); Hochelaga (105.1); St-Eusèbe (99.9); Ville-Marie (99.5); Villeray (90.4); St-Jean-Baptiste (88.0); Crémazie (85.4); Montcalm (80.3); Mercier (77.4); St-Jean (74.5); deLorimier et Rosemont (74.2); St-Edouard (73.5); St-Jacques (71.7); Bourget (71.6); Préfontaine (66.9) St-Paul (66.6).
- 2° The second group of morbidity rates classified in array are as follows: Ste-Marie (59.3); St-Michel (58.1); St-Henri (57.0); Mont-Royal (55.0); Lafontaine (53.4); N.D.G. (52.8); St-André (50.1); St-Louis (48.4); St-Denis (47.0); St-Joseph (37.9).
- 3° The following wards have had a comparative low rate: Laurier (21.9); Ste-Cunégonde (25.3); Papineau (27.5); St-Laurent (28.2); Ste-Anne (31.8); St-Gabriel (35.4); they are populous wards with a low economical and social level.
- 4° St-Georges is the least affected ward with a morbidity rate of 6.1.

B—DISTRIBUTION BY NUMBER OF CASES

If we consider the distribution by the number of cases in each municipal ward we note that:

- 1° The most affected wards have been: Villeray (63); Maisonneuve (53); Rosemont (43); Ahuntsic and deLorimier (37); N.D.G. (35); Hochelaga and St-Edouard (28); St-Jean-Baptiste (27); St-Eusèbe (24).

2° On the other hand the following wards have had but few cases: St-Georges (1); St-Joseph (4); Laurier, Papineau, Ste-Anne, Ste-Cunégonde (5 cases each); Lafontaine and St-Laurent (6); St-Gabriel (8).

The distribution of poliomyelitis, according to its morbidity rate, seems to indicate a distribution of the malady in all classes of society regardless of its economical or social rank.

Table VI
Hospitalization—1946

Hospitals	Ste-Jus- tine	Pasteur	Alex- andra	C.M.H.	Notre- Dame	Ste-Jeanne- d'Arc	Neurolog. Inst.
I—Total cases hos- pitalized at date of onset...	515	563	299	196	7	3	4
II—Cases actually hospitalized Dec. 31, 1946...	61	53	0	5	—	—	—
III—Discharged.....	—	—	—	—	—	—	—
1°—Deaths.....	17	37	12	3	1	1	—
2°—Cured.....	249	471	129	188	—	—	4
3°—Improved...	188	—	23	—	1	2	—
4°—Transferred	—	2	135	—	5	—	—

Hospitalization of cases

The hospitals treating cases of poliomyelitis have rendered the most valuable services to the City as well as to the Province. Mention must be made of Ste-Justine Hospital with 515 cases; Pasteur, 563; Alexandra, 299 and Children Memorial 196 (most of these cases were transferred from Alexandra Hospital after the contagion period was over. A few patients were also treated in the following hospitals: 7 at Notre-Dame, 3 at Ste-Jeanne d'Arc and 4 at the Neurological Institute.

On December 31st, 1946, there remained in hospitals 119 cases under treatment, of which 61 were at Ste-Justine, 53 at Pasteur and 5 at the Children Memorial Hospital.

The hospitalization problem

The need of personnel in hospitals created a problem of hospitalization, because, to assure to patients the required care, these institutions had to increase their staff. It was for this reason that the Department of Health of Montréal and the Provincial Ministry of Health have lent to the most affected hospitals, Ste-Justine and Pasteur, a certain number of nurses. More than 100 nurses of the Municipal Department of Health were dispatched to hospitals, in rotation and have done 942 days of work on a basis of 8 hours a day. The City paid the overtime work they were called to do. I must add that these nurses responded spontaneously and sympathetically to our appeal.

Table VII

**Distribution by district of residence of the outside cases
hospitalized in Montréal, as at December 31st, 1946**

Districts or counties	Number of cases	Places	Number of cases
Island of Montréal (City of Montréal excepted)	134	Senneville	3
		Verdun	35
		Ville St-Laurent	4
		Outremont	13
		Lachine	20
		Hampstead	3
		Westmount	12
		Montréal-Ouest	4
		Montréal-Nord	12
		Montréal-Est	2
		Ville St-Pierre	3
		Ville Mont-Royal	5
		Ville LaSalle	4
		Ville St-Michel	5
		Beaconsfield	1
		Dorval	1
		Pointe-Claire	1
		St-Léonard-de-Port-Maurice	2
		Ste-Anne-de-Bellevue	3
		Ste-Geneviève-de-Pierrefonds	1

Table VII (continued)

Districts or counties	Number of cases	Places	Number of cases
Laval (Ile Jésus)	15	Ste-Rose Laval-des-Rapides Pont-Viau L'Abord-à-Plouffe Rosemere St-Vincent-de-Paul St-Martin	3 4 2 1 1 2 2
Abitibi	12	Belcourt Amos Val d'Or Senneterre Rouyn Rochebeaucourt	1 1 5 1 3 1
Témiscamingue	2	Noranda Montreuil	1 1
Labelle	14	Ferme-Neuve L'Oranger Nominique Labelle Mont-Laurier La Minerve	3 2 3 1 2 3
Vaudreuil	8	Ile Perrot St-Lazare Ste-Marthe Hudson Heights	2 2 1 3
Soulanges	2	Les Cèdres Cascades	1 1
Iberville	18	Mont-St-Grégoire Henryville St-Alexandre St-Jean	4 4 2 8
Laprairie	10	Caughnawaga St-Philippe	9 1
Chambly	61	St-Lambert Montréal-Sud Longueuil Boucherville Greenfield Park St-Maxime Mackayville St-Bruno St-Hubert Côteau-Rouge	15 4 16 6 5 2 6 2 2 3

Table VII (continued)

Districts or counties	Number of cases	Places	Number of cases
Verchères	13	Contrecoeur	3
		Belœil	2
		Ste-Julie	2
		St-Antoine	2
		St-Denis	3
		Ste-Marie	1
Richelieu	7	St-Robert	1
		St-Joseph	1
		St-Ours	1
		Sorel	4
St-Jean	9	St-Blaise	1
		St-Jean	8
Rouville	4	Richelieu	1
		Rougemont	1
		Ste-Angèle	1
		Marieville	1
St-Hyacinthe	26	St-Hyacinthe	21
		Providence	1
		St-Jude	4
Napierville	3	St-Rémi	3
Beauharnois	4	Beauharnois	1
		Valleyfield	3
Papineau	3	Montebello	1
		Duhamel	1
		St-André-Avellin	1
Argenteuil	3	Brownsburg	1
		Huberdeau	1
		Weir	1
Deux-Montagnes	8	St-Augustin	1
		St-Hermas	1
		St-Benoît	1
		Oka	3
		St-Eustache	1
		St-Canut	1
Terrebonne	35	Val David	1
		Mont-Rolland	1
		St-Janvier	3
		St-Jovite	1
		Terrebonne	7
		Ste-Thérèse Blainville	7
		St-Jérôme	6
		St-Faustin	2
		Ste-Anne-des-Plaines	3
		Ste-Agathe	2
		Ste-Adèle	2

Table VII (continued)

Districts or counties	Number of cases	Places	Number of cases
L'Assomption	9	St-Gérard Majella L'Assomption St-Roch l'Achigan Charlemagne	1 3 1 4
Montcalm	17	Chertsey St-Emile St-Esprit St-Alexis St-Donat Rawdon St-Liguori	2 2 2 2 7 1 1
Joliette	13	St-Ambroise Joliette St-Thomas St-Félix-de Valois Ste-Emélie de l'Energie St-Côme	1 7 2 1 1 1
Berthier	17	Berthierville Lanoraie St-Damien St-Norbert St-Gabriel-de-Brandon St-Cuthbert St-Barthélémy St-Zénon Lavaltrie	3 2 1 1 3 1 3 2 1
Châteauguay	4	Howick St-Chrysostôme Châteauguay	1 1 2
Huntingdon	1	Ste-Agnès Dundee	1
Mégantic	5	Thetford Mines Plessisville Ste-Sophie	2 2 1
Wolfe	2	St-Adrien Weedon	1 1
Sherbrooke	1	Sherbrooke	1
Arthabaska	20	Arthabaska Warwick St-Christophe Ste-Clotilde St-Rémi Princeville St-Rosaire Madington Victoriaville St-Paul	2 3 1 1 1 6 1 1 3 1

Table VII (continued)

Districts or counties	Number of cases	Places	Number of cases
Nicolet	7	Ste-Eulalie Ste-Perpétue Lemieux Ashton	3 2 1 1
Drummond	43	St-Zénon Drummondville South Durham Kingsay Falls N.-D.-du-Bon-Conseil St-Simon St-Germain-de-Grantham St-Jean-Baptiste St-Cyrille de Wendover St-Nicéphore	1 28 1 3 1 1 3 2 2 1
Shefford	16	St-Valérien Roxton Falls Granby St-Joachim Waterloo	2 3 8 1 2
Brome	3	Sutton Knowlton	2 1
Missisquoi	17	Cowansville Farnham Clarendville St-Ignace Dunham Bedford Sweetsburg	6 4 1 3 1 1 1
Maskinongé	14	St-Paulin St-Didace Louiseville St-Edouard St-Léon	2 2 7 1 2
St-Maurice	13	Trois-Rivières Shawinigan-Falls Ste-Flore Pointe-du-Lac	5 5 2 1
Champlain	10	Cap-de-la-Madeleine St-Adolphe St-Georges Grand'Mère St-Narcisse	2 3 2 2 1
Laviolette	1	Grandes Piles	1
Gatineau	1	Hull	1

Table VII (continued)

Districts or counties	Number of cases	Places	Number of cases
Portneuf	2	Pont-Rouge Donnacona	1 1
Chicoutimi	1	St-Jean	1
Ontario	5	Hawkesbury Ottawa Port-Arthur Vankleek Hill	2 1 1 1
Bagot	23	St-Nazaire d'Acton Upton St-Pie Actonvale Ste-Hélène St-Hughes	4 10 2 1 4 2
Yamaska	28	Baie-du-Fèvre St-David St-François-du-Lac St-Thomas de Pierreville Yamaska St-Bonaventure St-Guillaume Visitation St-Zéphirin William-David	2 5 4 2 6 2 4 1 1 1
Lotbinière	4	Val Alain Ste-Agathe St-Flavien	1 2 1
Kamouraska	1	St-Pacôme	1
Rimouski	1	Le Bic	1
Matapédia	2	St-Benoît	2
Matane	1	Price	1
Bonaventure	4	St-Alphonse de Caplan St-Fidèle New Richmond Cross Point	1 1 1 1
Gaspé	6	Bridgeville Ste-Anne-des-Monts St-Joachim Marsoui	1 3 1 1
Nouveau-Brunswick	1	Caraquet	1
TOTAL:	684	.....	684

Comments

(Hospitalization of out-of-town cases.)

Besides the 684 local cases, **684 out-of-town** cases from various parts of Province were also treated in Montréal hospitals.

From the other municipalities of the Island, **134 cases** were hospitalized of which 35 were from Verdun, 20 from Lachine, 13 from Outremont, and 12 from both Westmount and Montreal-North.

Of the different parts of the Province, it was chiefly the Western District that has been most affected; 61 cases were from Chambly County (15 cases from St-Lambert and 16 from Longueuil); from Drummond County 43 cases (28 from the City of Drummondville); Yamaska County 28 cases; St-Hyacinthe County 26 cases (21 from the City of St-Hyacinthe); Bagot, 23 (10 from Upton); Iberville 18 cases, etc.; 5 cases from the Province of Ontario and 1 from New Brunswick were also treated in Montréal.

PROGRAMME OF ACTION IN THE FIGHT AGAINST POLIOMYELITIS—1946

I—Committee on Poliomyelitis and Board of Health

The Committee on Poliomyelitis was established in 1942 and reorganized in 1946 with the authorization of the Executive Committee of the City. It comprises members of the Board of Health, the Epidemiologist of the Province, representatives of hospitals treating cases of poliomyelitis and of the local Medical Societies.

It is composed as follows: His Worship the Mayor (Mr. C. Houde), the Chairman of the Board of Health (Councillor J. O. Asselin, President of the Executive Committee) and the Director of the Department of Health (Dr. Ad. Groulx), members ex-officio, and of Dr. Albert LeSage (municipal councillor and member of the Board of Health), Dr. Gaston Lapierre, of the Faculty of Medicine (Université de Montréal) and of Ste-Justine Hospital, member of the Board of Health; Dr. A. R. Foley, Epidemiologist of the Province, Dr. Edmond Dubé, Dean of the Faculty of Medicine of the Université de Montréal and medical director of Ste-Justine Hospital; Dr. H. Charbonneau, medical superintendent of Pasteur Hospital; Dr. W. M. Worden, medical superintendent of Alexandra Hospital; Dr. H. B. Cushing, attending physician at Alexandra Hospital; Dr. R. Smith, from McGill Pathological Institute; Dr. R. P. Vivian, Chairman, Department of Health and Social Medicine, McGill University; Mr. J. H. Roy, President of the Council of Hospitals of Montréal and manager of St-Luc Hospital; Dr. A. Frappier, Director of the Microbiology Institute and of the School of Hygiene of the Université de Montréal; Dr. A. Goldbloom of the Children's Memorial Hospital; Dr. J. H. Gervais, Superintendent of the Contagious Diseases Division of the Department of Health. Mr. H. H. Dansereau, Director of the Municipal Welfare Department and Dr. A. Valois, Demographer of the Department of Health, attended the meetings of the Committee as joint members.

The Committee held its first meeting on August 20, 1946. On August 30, a joint meeting was held with the members of the Board of Health. Another meeting was also called for September 18 and on February 17, 1947, another luncheon-meeting was held to inform the members of the exact situation of the epidemic which

was prevalent during the summer and the beginning of fall 1946. (During the various preceding meetings, the Committee was informed of the evolution of the epidemic and of the measures to be taken which are detailed below).

The members of the Committee revised the programme of action already studied in 1942 in case of an epidemic. They made a few suggestions and proposed new measures which were put into practice.

II—Measures taken by the Department of Health

(a) **Compliance with the Law and By-laws**

1. Insist upon the necessity and importance of **reporting** immediately all poliomyelitis cases to the Department of Health.
2. See that the patient is isolated at home and preferably at the hospital (hospitalization facilitated).
3. Compulsory placarding of all houses quarantined because a case of poliomyelitis was treated at home.

(b) To make the necessary epidemiological investigations in the homes or in hospitals to detect, if possible, the source or focus of the infection.

(c) Follow-up at home of all contacts during the quarantine, i.e.:

1. 10 days, if the patient is treated at the hospital;
2. 21 days, if the patient is kept at home.

(d) Give the necessary advice to families through the visiting nurses and distribution of a proper circular.

(e) Facilities given to physicians by the municipal laboratories for analyses of the spinal fluid.

(f) Ten pulmo-respirators manufactured by order of the City in 1938, have been placed at the disposal of the hospitals.

(g) Wading pools, swimming pools and public baths:

1. Interruption in the operation of wading pools (including hydrant baths) in parks and in the streets.
2. Restrictions in the use of public baths.

- (h) Suspension of picnics, trips, festivals, etc., has been recommended.

- (i) **Education and publicity**

1. Publications of the Department:
 - (a) "Poliomyelitis—General advice";
 - (b) "Advice to parents when a case of poliomyelitis occurs in a family".
2. Communiqués to the newspapers and the radio:
 - (a) Daily bulletins on the situation and advice to the population;
 - (b) Publicity: newspapers and radio. It has been decided, in 1942, that "All communiqués to the newspapers and advice to the population should come from one source only". This decision was upheld in 1946.

III—General measures recommended

- (a) **Personal hygiene.**

1. Well balanced diet.
2. Live outdoors and in the sun.
3. Avoid overwork and fatigue.
4. Observe the rules of cleanliness.

- (b) **Sanitary measures.**

1. Pasteurized or boiled milk.
2. To ascertain the quality of the water supply.
3. Carefully wash fruits and vegetables eaten raw.
4. Do not bathe in polluted water.
5. Deposit garbage in metal and well covered receptacles; add Javel water.

IV—Early diagnosis and treatment facilities

- (a) Call the doctor with the first symptoms of the disease; **do not delay.**
- (b) Examination of the spinal fluid: (in the laboratories of the hospitals, of the Ministry of Health and of the Department of Health).

- (c) All cases of poliomyelitis to be hospitalized. (See table 6).
- (d) **Pulmo-respirators:** 28 in the hospitals (9 were portable units).
- (e) Avoid tonsillectomy and the extraction of teeth during a period of epidemic.
- (f) Orthopedic apparatus provided by hospitals.

V—Necessary co-operation received from:

- (a) Medical profession, nurses and **social organizations**, Red Cross, etc.
- (b) The Clergy, His Excellency Mgr. Charbonneau made a special appeal to his priests and believers, requesting them to follow the advice of the health authorities.
- (c) **Public services**
 - 1. The Ministry of Health and Social Welfare.
 - 2. The municipal departments of Public Works and Social Welfare.
 - 3. The Catholic and Protestant School Boards.
- (d) The Press and radio stations.
- (e) The population and specially the parents.

VI—School opening retarded

The opening of schools was retarded until September 16. In spite of the two weeks' delay which was given, in view of past experience in similar circumstances in Montréal and elsewhere, and seeing that there still exists some anxiety as to the reopening of classes, the Committee of poliomyelitis and the Department of Health were of the opinion that:

- 1° The epidemic in the City of Montréal reached its peak at the beginning of August;

2° It has been observed, in Montréal and in other large American centres, that the reopening of schools in times of epidemic does not alter the course of an epidemic. In 1931, in Montréal, among children of school age, the proportion reached prior to school opening was 31% of the total; after the schools opened, the ratio remained at 34%. This is not enough of a difference to warrant attributing any special significance to it;

3° It is recognized by competent public health authorities, especially in relation to the policy to be followed in school hygiene and in the field of communicable diseases, that:

“Contrary to beliefs expressed in popular hysteria, epidemics occurring in communities having well-organized, efficient public health facilities usually can best be controlled if schools remain open but take special precautions for regular daily inspections and continuing observation to detect promptly any students who show signs of illness”; and this applies especially to a large city where “schools must remain open even during epidemics”. (Suggested School Health Policies—1945).

Moreover, the supervision exercised in the schools through the joint action of the teaching and medical staffs may permit of the detection of cases which might otherwise remain unnoticed. Attendance at schools, because of stricter routine, may prevent excessive fatigue among pupils, unsuitable playing conditions in streets and lanes and thus stop the spreading of the malady.

Instructions concerning the “Role of the teacher in the control of communicable diseases in schools” were prepared by the Department of Health and transmitted to teachers by the School Boards

CANADIAN LEGION—THE MARCH OF DIMES

The Canadian Legion gave its worthy co-operation to the fight against poliomyelitis by organizing a special subscription called "The March of Dimes". In a few weeks, the Legion collected generous contributions which permitted to give a material assistance to hospitals, institutions and societies treating or interested in handicapped children, victims of poliomyelitis. The Legion provided these institutions with orthopedic apparatus, pulmo-respirators, etc.

I beg to mention this initiative and the good it has done and will be called to do.

This organization seems established on a solid basis with a permanent Committee composed, besides the members of the Legion, of the following Trustees: Dr. J. Grégoire, Dr. H. B. Cushing, Dr. Ad. Groulx and Mr. H. H. Dansereau.

The Department of Health wishes to express its gratitude and its hearty thanks to all persons and organizations which have given their co-operation to combat the epidemic of poliomyelitis which was prevalent in Montréal during 1946.

Dr. AD. GROULX, M.P.H.,
Director, Department of Health.

THE BOARD OF HEALTH

1946

The Board of Health is appointed by resolution of the City Council under authority conferred by By-law No. 105 as amended by By-laws Nos. 1044, 1188 and 1671.

This Board, appointed by Council resolution of October 22, 1946, was composed for that year of the following:

His Worship the Mayor, *ex officio*;

The Chairman of the Executive Committee, *ex officio*;

The Director of the Department of Health, *ex officio*;

Councillor W. R. Bulloch;

Councillor Hector Prud'homme, m.d.;

Councillor A. D. Quintin;

Councillor Eudore Dubeau, l.d.s.;

Councillor Albert LeSage, m.d., member of the Faculty of Medicine, Université de Montréal;

Dr. Gaston Lapierre, member of the Faculty of Medicine, Université de Montréal;

Dr. Albéric Marin, member of the Faculty of Medicine, Université de Montréal, and specialist in skin diseases;

Dr. J. C. Meakins, Dean of the Faculty of Medicine, McGill University;

Dr. R. Percy Vivian, member of the Faculty of Medicine, McGill University;

Dr. L. P. Ereaux, member of the Faculty of Medicine, McGill University and specialist in skin diseases;

Mr. T. J. Lafrenière, Sanitary Engineer and Professor at the Polytechnical School, Université de Montréal;

Mr. R. de L. French, Sanitary Engineer and member of the Faculty of Civil Engineering, McGill University;

Dr. D. P. Mowry, member of the Faculty of Dental Surgery,
McGill University;

Mr. Paul A. Gagnon, practising pharmacist;

Mr. Kenneth Tyrrell, practising pharmacist.

Questions studied

During the year, the Board studied the following questions:

1° The enlarging or reconstruction of Ste-Justine Hospital.

To this effect, a Committee was appointed to study that question and submitted its report to said Commission on February 6th, 1946.

The members of this Committee are the following:

Councillor Hector Prud'homme, m.d.;

Councillor A. D. Quintin;

Dr. Gaston Lapierre, member of the Faculty of Medicine,
Université de Montréal;

Dr. D. P. Mowry, member of the Dental Surgery, McGill
University;

Dr. Edmond Dubé, Medical Director, Ste-Justine Hospital;

Mr. Honoré Parent, K.C., Director of Departments;

Mr. H. H. Dansereau, Director, Social Welfare Department;

Dr. Ad. Groulx, Director, Department of Health.

2° The report of the activities of the Department of Health
for the year 1945.

3° The poliomyelitis situation in the City during the year 1946
and the means to be taken to fight that plague.

The Committee appointed by the director of the Department
of Health to study that question was composed as follows:

His Worship the Mayor, ex officio;

Mr. J. O. Asselin, Chairman of the Executive Committee,
ex officio;

Dr. Albert LeSage, councillor;

Dr. Gaston Lapierre, member of the Board of Health;

Dr. Edmond Dubé, Medical Superintendent, Ste-Justine
Hospital and Dean, Faculty of Medicine, Université de
Montréal;

Dr. H. Charbonneau, Medical Superintendent, Pasteur
Hospital;

Dr. F. Smith, McGill University;

Dr. H. B. Cushing, Alexandra Hospital;

Dr. R. P. Vivian, Chairman, Department of Health and Social
Medicine, McGill University;

Dr. R. Foley, Epidemiologist of the Province;

Dr. E. M. Worden, Medical Superintendent, Alexandra
Hospital;

Dr. A. Goldbloom, Children's Memorial Hospital;

Dr. Armand Frappier, Director, "Institut de microbiologie et
d'hygiène de l'Université de Montréal";

Mr. J. H. Roy, Superintendent, St-Luc Hospital;

Dr. Adélard Groulx, Director, Department of Health;

Dr. J. H. Gervais, Superintendent of the Communicable
Diseases, Division of the Department of Health of the
City of Montréal.

GÉRARD BOUDREAU,

Secretary.

Office of the Director

**Report of the
SECTION OF PUBLIC HEALTH EDUCATION
for the year 1946**

by

ADRIEN PLOUFFE

Doctor of Public Health

Assistant Director, Department of Health

The Annual Report

In 1946, we published the 1945 Annual Report which contained the report of the Director on the Statement of Expenditures 1945-1946, an appreciation of the demographic movement with comments (population, births, marriages, deaths, principal causes of general mortality, maternal mortality and infant mortality); a chapter on contagious diseases, small-pox and vaccination, diphtheria and immunization, combined vaccine and whooping-cough, the situation of tuberculosis, the fight against venereal diseases in Montréal in 1945; a chapter on child hygiene (the nurses, dental hygiene, the proper nutrition campaign); a chapter on sanitary inspection, the inspection of milk and food, the work of laboratories, the division of medical control, the vital statistics, the Public Health Education, Health Districts, the personnel (scholarships and certificates of sanitary inspection (C.S.I.)), the Board of Health; then came the Section of Public Health Education and the Section of Health Districts.

The Health Bulletin

The Health Bulletin was published every other month during the year 1946. Here are the main articles: Health Week. Milk Inspection and Pasteurization in Montréal, by Dr. Ad. Groulx. Annual Medical Examination of Civic Employees. Venereal Diseases. Health Through Cleanliness, by Dr. Ad. Groulx. Certain Aspects of Health, by Dr. J. A. Landreville. Unhealthful dwellings, Health and Juvenile delinquency, by Mr. Léo-Paul Cabana. Satisfaction of fundamental needs of the child as a basis of personality, by Dr. J. E. A. Marcotte. War against Diphtheria. Diphtheria and Whooping-cough immunization, by Dr. C. W. MacMillan. Report of the Nutrition Campaign undertaken jointly in Montreal by the Local Nutrition Committee and the Department of Health. Bacteriological and chemical analyses of milk, by Dr. R. Bérard. Supervision of the quality of milk, by Mr. Garcia Bouchard. Controlling the health of herds, by Dr. A. Martel. In Memoriam, Dr. Séraphin Boucher, by Dr. Ad. Groulx. Control of contagious diseases in Montréal, by Dr. H. B. Cushing. The functions of the director of health in the city of Montréal, by Dr. Ad. Groulx. The preliminary report of 1946, by Dr. Ad. Groulx.

Radio

Under the auspices of various associations and through the courtesy of radio stations, members of our personnel have given talks on the following questions: medical inspection of schools, dental hygiene, necessity of immunization against diphtheria, combined vaccine against diphtheria and whooping-cough, fight against infant and maternal mortality, campaign against venereal diseases; Health Districts, teaching of social and public health, fight against alcoholism. A great number of five minute talks were especially devoted to young people, which is a good way to keep children and youth in a complete atmosphere of health consciousness.

Newspapers

As usual the Department of Health has transmitted to the newspapers from time to time news items and releases which tended to interest the public.

The Section of Public Health inspection also offered a special and unceasing collaboration to the newspapers and periodicals. In 1946 more than 800 different articles were published under various titles: "Department of Health", "Health is wealth", "To serve your health", "The good health bulletin", "The living capital", "Safeguard your health", "A health idea every day", "For your health", etc.

To these last titles the Section of Public Health Education has added, in 1946, the publication of a weekly release entitled: "The Department of Health calling Montréal". This is a short article concerning different matters pertaining to individual, social and public health.

A choice position is always given to our propaganda articles. Dailies, weeklies and periodicals offer the most generous welcome to these releases. If the Department of Health can give to the population all the useful information about health and prevention of diseases, it is due to the courtesy of the press. More than ever, the publicity through radio stations and newspapers constitute a most dynamic medium of propaganda.

It is a most agreeable duty to offer our earnest thanks to the press and radio stations for their comprehensive goodwill.

It is due to the splendid collaboration that the Section of Public Health Education can diffuse the ideas of health and preventive medicine, and that we are given the opportunity to serve the well-being and happiness of our fellow-citizens.

Report of the
SECTION OF THE HEALTH DISTRICTS
for the year 1946

by

Doctor C. A. BOURDON, M.P.H.,
Special Officer and Chief of the Health Districts

Personnel of the Health Districts:

Dr. C. A. Bourdon, M.P.H., Special Officer and Chief of the Health Districts.

Dr. J. A. Landreville, M.P.H., Special Officer and Assistant Chief of the Health Districts.

District Health Officers:

Dr. J. Beauvilliers, D.P.H., Maisonneuve Health District.

Dr. F. Derome, D.P.H., Saint-Jacques Health District.

Dr. D. Melançon, D.P.H., South-Western Health District.

Dr. E. Chabot, D.P.H., Rosemont Health District.

Dr. C. de Guise, M.P.H., Notre-Dame-de-Grâce Health District.

Dr. A. H. Prévost, D.P.H., DeLorimier Health District.

Dr. P. E. Hamelin, D.P.H., Northern Health District.

District Supervisor Nurses:

Miss M. Olivier, Maisonneuve Health District.

Miss T. Cardin, Saint-Jacques Health District.

Miss R. Pilon, South-Western Health District.

Miss L. Leblanc, Rosemont Health District.

Miss M. A. Lacroix, Notre-Dame-de-Grâce Health District.

Miss B. Rainville, DeLorimier Health District.

Miss A. Savard, Northern Health District.

Table I
Statistics of births and deaths in the health districts: Maisonneuve, Saint-Jacques, South-Western, Rosemont, Notre-Dame-de-Grâce, De Lorimier, Northern and in the entire City—1946

	Health Districts							Entire City
	Maisonneuve	Saint-Jacques	South-Western	Rosemont	N.D.G.	De Lorimier	Northern	
Population.....	114,602	144,564	103,533	116,210	129,571	150,558	133,952	1,007,000
Number of births.....	2,896	4,303	2,484	3,122	2,873	3,137	2,711	23,555
Birth rate per 1,000 population.....	25.27	29.76	23.99	26.86	22.17	20.84	20.24	23.39
Number of deaths.....	994	1,833	1,148	926	1,014	1,490	820	9,767
General mortality rate per 1,000 population.....	8.67	12.67	11.09	7.97	7.82	9.90	6.12	9.70
Maternal mortality (per 1,000 live births).....	1.38	2.32	2.01	2.88	0.35	1.59	1.11	1.66
Infant mortality (per 1,000 live births).....	51.10	62.97	55.96	34.59	29.93	57.06	40.58	49.25
Mortality from diarrhoea 0-1 year. (per 1,000 live births).....	2.42	4.42	4.02	1.60	1.04	3.51	1.84	2.84
Mortality from tuberculosis (per 100,000 population)								
a) pulmonary.....	60.21	97.54	74.37	49.91	31.64	43.17	45.54	56.90
b) other forms.....	5.24	8.99	9.66	7.74	6.18	11.29	8.96	8.44
Total.....	65.45	106.53	84.03	57.65	37.82	54.46	54.50	65.34

Table II
Number and percentage of deaths for certain age groups in the health districts:
Maisonneuve, Saint-Jacques, South-Western, Rosemont, Notre-Dame-de-Grâce,
De Lorimier, Northern and in the entire City—1946

Age Groups	Health Districts												Entire City			
	Maisonneuve		Saint-Jacques		South-Western		Rosemont		N.D.G.		De Lorimier				Northern	
	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%	Deaths	%
0-1 year.....	148	14.89	271	14.78	139	12.11	108	11.66	86	8.48	179	12.01	110	13.41	1,160	11.88
1-4 years.....	22	2.21	30	1.64	23	2.00	23	2.48	10	0.99	28	1.88	18	2.20	177	1.81
5-14 years.....	21	2.11	27	1.47	16	1.39	13	1.41	10	0.99	18	1.21	9	1.10	127	1.30
15 years and over....	803	80.79	1,505	82.11	970	84.50	782	84.45	908	89.54	1,265	84.90	683	83.29	8,303	85.01
Total.....	994	100.00	1,833	100.00	1,148	100.00	926	100.00	1,014	100.00	1,490	100.00	820	100.00	9,767	100.00

Deaths from certain causes and death-rate per 100,000 population in the health districts:
Maisonneuve, Saint-Jacques, South-Western, Rosemont, Notre-Dame-de-Grâce, De Lorimier,
Northern and in the entire city—1946

CAUSES	Health Districts												Entire City							
	Maisonneuve						Saint-Jacques		South-Western		Rosemont				N.D.G.		De Lorimier		Northern	
	Deaths		Rate per 100,000 pop.		Deaths		Rate per 100,000 pop.		Deaths		Rate per 100,000 pop.				Deaths		Rate per 100,000 pop.		Deaths		Rate per 100,000 pop.
	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.	Deaths	Rate per 100,000 pop.		
Typhoid.....	1	0.87	0	0.00	0	0.00	0	0.00	0	0.00	1	0.67	0	0.00	2	0.20				
Measles.....	1	0.87	2	1.38	0	0.00	2	1.72	0	0.00	3	1.99	2	1.49	10	1.00				
Scarlet Fever.....	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00				
Whooping-cough.....	0	0.00	0	0.00	0	0.00	1	0.86	0	0.00	1	0.67	0	0.00	3	0.30				
Diphtheria.....	3	2.62	2	1.38	1	0.96	2	1.72	2	1.54	8	5.31	1	0.75	22	2.18				
Pulmonary tuberculosis.....	69	60.20	141	97.54	77	74.37	58	49.91	41	31.64	65	43.17	61	45.54	573	56.90				
Tuberculosis other forms.....	6	5.24	13	8.99	10	9.66	9	7.74	8	6.17	17	11.29	12	8.96	85	8.44				
Other contagious diseases.....	6	5.24	13	8.99	5	4.83	8	6.89	4	3.09	6	3.98	3	2.24	52	5.16				
Other causes.....	908	792.31	1,662	1,149.67	1,055	1,019.00	846	727.99	959	740.14	1,389	922.57	741	553.18	9,020	895.73				
Total.....	994	867.35	1,833	1,267.95	1,148	1,108.82	926	796.83	1,014	782.58	1,490	989.65	820	612.16	9,767	969.91				

Table IV

Summary of the work accomplished in the control and the prevention of contagious diseases in the health districts: Maisonneuve, Saint-Jacques, South-Western, Rosemont, Notre-Dame-de-Grâce, De Lorimier, Northern and in the entire City—1946

	Health Districts						Entire City
	Maisonneuve	Saint-Jacques	South-Western	Rosemont	N.D.G.	De Lorimier	Northern
Number of cases reported and confirmed.....	1,675	2,042	1,444	2,460	1,883	1,795	2,251
Number of deaths.....	86	171	93	80	55	101	79
Number of cases hospitalized..... (Tuberculosis not included)	471	723	361	266	163	354	617
Home visits: by physicians.....	649	663	482	712	235	407	512
by nurses.....	1,384	1,994	1,657	2,354	1,644	1,027	1,794
Tuberculin Test (Vollmer).....	575	110	224	669	422	333	366
Immunization Number of children who had received the three doses on December 31st, 1946: against diphtheria.....	2,504	2,659	2,241	2,317	1,393	2,058	2,344
against whooping cough.....	3,053	2,970	2,620	2,857	1,521	2,338	2,857
Vaccination against smallpox.....	2,559	979	1,718	1,776	993	2,160	2,377
							14,728

Table VI

Number of children immunized against diphtheria, who have received the three doses of Anatoxine-Ramon, in the health districts: Maisonneuve, Saint-Jacques, South-Western, Rosemont, Notre-Dame-de-Grâce, De Lorimier, Northern and in the entire City—1946

Age at time protected	Health Districts						Entire City
	Maisonneuve	Saint-Jacques	South-Western	Rosemont	N.D.G.	De Lorimier	Northern
0 to 1 year.....	1,500	1,263	1,225	1,484	889	1,190	1,501
1 year.....	251	253	236	300	160	206	301
2 years.....	146	227	143	121	90	121	138
3 years.....	104	145	114	85	49	89	102
4 years.....	86	85	83	67	57	55	62
5 years.....	69	111	78	65	45	61	64
6 years.....	172	290	183	122	59	174	117
7 years.....	91	169	86	42	19	106	30
8 years.....	57	68	62	24	8	35	18
9 years.....	13	41	24	5	5	18	7
10 years and over.....	15	7	7	2	12	3	4
Total.....	2,504	2,659	2,241	2,317	1,393	2,058	2,344
							16,563

Number of children immunized against whooping-cough, who had received the three doses of diphtheria and pertussis vaccine, in the health districts: Maisonneuve, Saint-Jacques, South-Western, Rosemont, Notre-Dame-de-Grâce, De Lorimier, Northern and in the entire City—1946

Table VII

Age at time protected	Health Districts						Entire City
	Maisonneuve	Saint-Jacques	South-Western	Rosemont	N.D.G.	De Lorimier	Northern
0 to 1 year.....	1,529	1,171	1,055	1,425	756	1,127	1,453
1 year.....	262	236	240	280	141	205	296
2 years.....	194	216	157	173	99	143	190
3 years.....	190	157	179	188	75	118	227
4 years.....	140	115	142	144	79	93	173
5 years.....	115	152	167	176	88	96	145
6 years.....	315	457	344	326	143	327	237
7 years.....	168	259	178	82	52	138	81
8 years.....	94	130	97	47	52	58	40
9 years.....	31	71	47	14	16	30	11
10 years and over.....	15	6	14	2	20	3	4
Total.....	3,053	2,970	2,620	2,857	1,521	2,338	2,857
							19,376

Table VIII

Number of children vaccinated against smallpox, in the health districts: Maisonneuve, Saint-Jacques, South-Western, Rosemont, Notre-Dame-de-Grâce, De Lorimier, Northern and in the entire City — 1946

Age at time protected	Health Districts						Entire City
	Maisonneuve	Saint-Jacques	South-Western	Rosemont	N.D.G.	De Lorimier	
0 to 1 year.....	526	2	13	19	122	22	1,083
1 year.....	74	23	22	13	40	12	286
2 years.....	81	26	41	34	43	32	360
3 years.....	131	48	69	66	60	90	608
4 years.....	216	76	158	159	82	157	1,109
5 years.....	554	215	465	603	312	587	3,450
6 years.....	842	433	744	758	266	1,044	5,423
7 years.....	86	88	106	57	18	139	778
8 years.....	10	14	20	13	6	22	132
9 years.....	4	10	10	6	4	14	64
10 years and over.....	35	44	70	48	40	41	1,435
Total.....	2,559	979	1,718	1,776	993	2,160	14,728



Division of communicable diseases

Report of the
DIVISION OF COMMUNICABLE DISEASES
for the year 1946

by

Dr. J. H. GERVAIS, D.P.H.,
Superintendent

Two diseases have particularly marked the evolution of communicable diseases in 1946. During the first six months, measles showed an evident progression to reach 7,207 cases.

From the end of June till the middle of November, poliomyelitis took an epidemic aspect: 684 cases were then registered.

If we consider the number of cases reported for these two diseases only, i.e.: 7,891 cases, we may say that, in comparison with a total number of 12,299 reported cases in 1946, cases of tuberculosis not being included, the evolution of the other communicable diseases was rather decreasing; in 1946 we registered for whooping-cough 532 cases against 2,345 in 1945; for mumps 226 cases as compared to 2,741 in 1945 and for chicken-pox 1,973 against 2,364 cases in 1945.

Regarding diphtheria, the same remark can be made as only 149 cases were registered for 1946 as compared with 186 in 1945.

As far as typhoid fever and paratyphoid fever are concerned, we may state that these two diseases have evolved at a normal rate as 34 cases only were reported in 1946; the mean of the five preceding years being 81 cases.

In general, we have reason to conclude that the evolution of communicable diseases in 1946 was inferior to the mean of the five preceding years; the rate of fatality by 100 cases was .73 in 1946 against .77 for the mean of the last five years.

Besides the activities detailed in the following summary, we must state that a new section "the Health Card Section" was added to the Division of Communicable Diseases and the work performed by the above mentioned section will be given by Dr. C. A. Bourdon, who assumes its temporary direction.

You will also find, following the present report, the annual report of the Tuberculosis Section by Dr. L. Ladouceur.

Summary

Cases reported (tuberculosis included)	15,151
Number of deaths (tuberculosis included)	748
Cases hospitalized	3,366
Control visits by physicians	6,212
Visits by nurses (tuberculosis included)	19,817
Visits by disinfectors	4,794
Number of disinfections	1,971
Houses placarded	1,643

Number of vaccinations:

Against smallpox:

(a) Medical Control	1,276	
(b) Child Hygiene	9,312	
(c) Private physicians	682	
(d) Child Welfare	0	
(e) Gouttes de lait paroissiales	0	
(f) Other institutions	0	
	<hr/>	11,270

Against diphtheria:

(a) Child Hygiene	12,245	
(b) Private physicians	1,107	
(c) Child Welfare	651	
(d) Gouttes de lait paroissiales	2,371	
(e) Other institutions	189	
	<hr/>	16,563

Against whooping-cough:

(a) Child Hygiene	15,843
(b) Private physicians	645
(c) Child Welfare	365
(d) Gouttes de lait paroissiales	2,348
(e) Other institutions	175
	————— 19,376

Free distribution of scarlet fever toxin (No. of vials) 118

Free distribution of anti-diphtheria serum (No. of vials) 620

Free distribution of tuberculin test (Vollmer Test) 24,000

Free distribution of Toxoid (Anatoxine Ramon) for
diphtheria:

No. of packages of 18 c.c.	10
No. of packages of 6 c.c.	12
No. of packages of 3 c.c.	2,224

Free distribution of combined vaccine (diphtheria and
whooping-cough):

No. of packages of 6 c.c.	6,740
No. of packages of 24 c.c.	2,146
No. of packages of 36 c.c.	3,804

Number of dog bites reported to the Division of Com-
municable Diseases 223

Various analyses submitted to the Municipal Laboratory. 17,036

The Health Card

Following the death of Doctor J. A. Charron, superintendent of the Division of Medical Control, which occurred on January the 20th, 1946, the Executive Committee by a resolution dated January the 29th, 1946, ruled that the issuing of the health card be entrusted to the Division of Communicable Diseases and approved the transfer to this Health Card Section of a part of the personnel formerly attached to the Medical Control. The persons employed for this work comprise three physicians, one nurse and two office clerks.

The temporary reorganization of this newly created section was under the supervision of Doctor C. A. Bourdon, M.P.H., Special Officer and Chief of the Sanitary Districts.

For a better control of distribution, a new health card with a duplicate and a "cardwheel system" were put into operation of March the 23rd, 1946.

By-law No. 1801, (amending by-law No. 926 concerning food establishments and restaurants) was applied as amended by by-law No. 1120, article 10, concerning the issuing of the health card.

The work concerning the issuing of the health card has given the following results:

1—Health cards issued and renewed:

(a) Food handlers	26,659
(b) Barbers, hairdressers, personnel of children's boarding-houses and private maternities	3,263
Total	29,922

2—Vaccination against smallpox:

(a) Number of vaccinations	1,276
(b) Number of revaccinations	8
(c) Number of verifications	893

3—Chest X-Ray examinations:

Groups of employees	Laurier Clinic	Other clinics	Total
Food handlers (milk).....	1,078	764	1,842
Food handlers.....	363	1,477	1,840
Barbers, masseurs, etc.....	43	2	45
Private hospitals, children's boarding- houses.....	71	136	207
Total.....	1,555	2,379	3,934

This new examination will be done for all food handlers as soon as the facilities will permit.

4—Laboratory analyses—research of typhoid germ carriers (blood analyses: Widal and Dreyer; faeces and urine):

- (a) Number of milkmen who came for the first examination..... 855
- (b) Number of milkmen who came for the second examination..... 683

In these groups are included 22 handlers who are not milk handlers (these persons prepare sandwiches for receptions, etc).

Milkmen must come twice, one week apart, when they apply for the first time to obtain the health card.

5—Venereal diseases:

- Syphilis.—Blood samples taken at the municipal laboratories and sent to the provincial laboratories 2,604
- Reports from a private physician or a clinic..... 33
- Total..... 2,637
- Gonorrhea.—Specimens taken and analyzed at the municipal laboratories..... 2,495

Table I

Diseases	Cases reported	Morbidity rate by 100,000 population	Deaths	Fatality rate by 100 cases
Whooping cough.....	532	52.8	3	0.56
Diphtheria.....	149	14.8	22	14.76
Amoebic dysentery.....	1	0.1	0	.....
Bacillary dysentery.....	15	1.4	1	6.66
Lethargic encephalitis.....	1	0.1	1	.....
Erysipelas.....	51	5.1	2	3.92
Undulant fever.....	7	0.69	1	14.28
Cerebrospinal meningitis....	12	1.1	12	.....
Purulent ophthalmia.....	16	1.5	0	.....
Mumps.....	226	22.4	0	.....
Poliomyelitis.....	684	67.9	25	3.65
Paratyphoid fever.....	8	0.8	2	25.00
Pemphigus.....	3	0.3	0	.....
Measles.....	7,207	715.6	10	0.13
German measles.....	362	35.9	0	.....
Scarlet fever.....	1,016	100.9	0	.....
Puerperal septicaemia.....	9	0.9	9	.....
Trichinosis.....	1	0.1	1	.....
Typhoid fever.....	26	2.5	0	.....
Chickenpox.....	1,973	195.9	1	0.05
Smallpox.....	0	0	0	.....
Total.....	12,299	1,221.3	90	0.73
Pulmonary tuberculosis....	2,679	266.03	574	21.4
Tuberculosis other forms...	173	17.1	84	48.55
Grand total.....	15,151	1,504.5	748	4.93

Table II
Typhoid fever and Paratyphoid fever "B"

Months	Distribution													
	Number of cases				Source of infection				Hospitalization				Deaths	
	Local		Outside		In Montreal		Outside of Montreal		Local cases		Outside cases		Local cases	
	Eb.	Par. B.	Eb.	Par. B.	Eb.	Par. B.	Eb.	Par. B.	Eb.	Par. B.	Eb.	Par. B.	Eb.	Par. B.
January....	3	0	1	0	3	0	1	0	3	0	1	0	0	0
February...	2	0	0	0	1	0	1	0	1	0	0	0	0	0
March.....	2	0	1	0	1	0	2	0	0	0	1	0	0	0
April.....	2	1	2	2	2	0	2	3	1	1	2	2	1	1
May.....	0	0	2	0	0	0	2	0	0	0	2	0	0	0
June.....	2	0	3	0	2	0	3	0	0	0	3	0	0	0
July.....	1	1	2	1	0	0	3	2	1	1	2	1	0	0
August.....	2	3	1	0	2	1	1	2	2	3	1	0	0	0
September..	6	2	2	0	1	2	7	0	1	1	2	0	0	0
October....	3	0	1	0	0	0	4	0	2	0	1	0	0	0
November..	1	1	1	0	1	1	1	0	1	1	1	0	0	0
December..	2	0	1	0	1	0	2	0	2	0	1	0	0	0
Total.....	26	8	17	3	14	4	29	7	22	7	17	3	0	1

Percentage of deaths for local cases: Typhoid fever: 0% — Paratyphoid fever B: 25%.
Morbidity rate by 100,000 population: Typhoid fever: 2.5% — Paratyphoid fever B: 0.7%.

Table III
Classification by ages

Diseases	Under 1 year	1 to 4 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 29 years	30 to 39 years	40 to 49 years	50 to 59 years	60 to 69 years	70 to 79 years	80 to 89 years	90 to 100 years	Total
Whooping cough.....	123	242	155	11	0	0	1	0	0	0	0	0	0	532
Diphtheria.....	4	58	59	12	6	8	1	0	1	0	0	0	0	149
Amoebic dysentery.....	unclassified	unclassified	cases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Bacillary dysentery.....	unclassified	unclassified	cases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
Lethargic encephalitis....	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Erysipelas.....	1	1	3	1	1	5	5	15	8	10	1	0	0	51
Undulant fever.....	0	0	0	1	1	0	2	1	1	0	0	1	0	7
Cerebrospinal meningitis..	7	3	1	0	1	0	0	0	0	0	0	0	0	12
Purulent ophthalmia.....	12	3	0	1	0	0	0	0	0	0	0	0	0	16
Mumps.....	1	53	108	28	9	19	5	3	0	0	0	0	0	226
Poliomyelitis.....	9	203	219	106	69	50	26	2	0	0	0	0	0	684
Paratyphoid fever.....	0	1	0	2	2	0	0	0	2	1	0	0	0	8
Pemphigus.....	unclassified	unclassified	cases	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Measles.....	269	2,528	4,100	205	36	49	14	3	2	1	0	0	0	7,207
German measles.....	11	51	215	48	24	10	1	1	1	0	0	0	0	362
Scarlet fever.....	6	226	551	180	30	16	5	1	1	0	0	0	0	1,016
Puerperal septicaemia....	0	0	0	0	0	6	2	1	0	0	0	0	0	9
Trichinosis.....	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Typhoid fever.....	0	5	4	5	1	2	4	5	0	0	0	0	0	26
Chickenpox.....	90	451	1,248	129	23	26	2	3	0	1	0	0	0	1,973
Smallpox.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total.....	533	3,825	6,663	729	203	193	68	35	16	13	1	1	0	12,299
Pulmonary tuberculosis....	10	31	28	59	255	627	553	449	376	221	60	10	0	2,679
Tuberculosis other forms.	4	6	9	13	28	56	19	14	14	7	3	0	0	173
Grand total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,151

Table IV

Classification by months

Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total	Total of deaths 1946
Whooping cough.....	61	61	45	38	29	32	23	48	35	41	46	73	532	3
Diphtheria.....	14	12	14	10	8	13	7	13	8	14	17	19	149	22
Amoebic dysentery.....	unclassified	unclassified	cases	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	0
Bacillary dysentery.....	unclassified	unclassified	cases	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	1
Lethargic encephalitis.....	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Erysipelas.....	7	9	5	0	7	3	3	2	1	1	10	3	51	2
Undulant fever.....	0	0	1	1	1	1	0	0	0	0	2	1	7	1
Cerebrospinal meningitis..	2	1	2	1	1	1	1	0	1	1	1	0	12	12
Purulent ophthalmia.....	0	1	6	2	3	1	1	1	0	1	0	0	16	0
Mumps.....	18	25	41	24	25	22	14	4	7	12	21	13	226	0
Poliomyelitis.....	1	0	0	0	0	1	29	349	241	57	5	1	684	25
Paratyphoid fever.....	0	0	0	1	0	0	1	3	2	0	1	0	8	2
Pemphigus.....	unclassified	unclassified	cases	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	0
Measles.....	570	997	1,993	1,608	1,261	570	127	40	14	8	11	8	7,207	10
German measles.....	11	58	68	64	74	58	7	2	3	2	9	6	362	0
Scarlet fever.....	66	61	104	143	143	103	35	22	35	56	119	129	1,016	0
Puerperal septicaemia.....	0	2	1	0	1	0	0	1	0	0	2	2	9	9
Trichinosis.....	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Typhoid fever.....	3	2	2	2	0	2	1	2	6	3	1	2	26	0
Chickenpox.....	194	127	135	158	201	141	62	29	26	118	340	442	1,973	1
Smallpox.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total.....	947	1,356	2,417	2,052	1,754	948	311	516	379	314	585	701	12,299	90
Pulmonary tuberculosis...	191	230	339	208	243	250	236	129	221	228	187	217	2,679	574
Tuberculosis other forms.	12	15	11	15	18	18	17	8	22	16	11	10	173	84
Grand total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,151	748

Table

Classification

Wards	Whooping cough	Diphtheria	Amoebic dysentery	Bacillary dysentery	Lethargic encephalitis	Erysipelas	Undulant fever	Cerebrospinal meningitis	Purulent ophthalmia	Mumps	Poliomyelitis
Ahuntsic.....	2	1	—	—	0	0	1	0	1	3	37
Bourget.....	7	5	—	—	0	1	0	2	0	2	19
Crémazie.....	26	3	—	—	0	3	0	0	1	16	17
DeLorimier....	27	7	—	—	0	2	1	0	0	3	37
Hochelaga.....	13	7	—	—	0	1	0	0	5	3	28
Lafontaine.....	9	3	—	—	0	0	1	0	0	3	6
Laurier.....	18	10	—	—	0	1	0	0	1	2	5
Maisonneuve...	11	8	—	—	0	4	0	1	0	4	53
Mercier.....	15	2	—	—	0	3	0	0	0	17	20
Montcalm.....	29	2	—	—	0	1	0	1	0	2	19
Mount Royal..	7	0	—	—	0	0	1	0	0	4	14
N. D. de Grâces.....	8	3	—	—	0	1	1	0	2	39	35
Papineau.....	15	9	—	—	0	2	0	0	0	4	5
Préfontaine....	2	3	—	—	0	2	0	0	0	1	17
Rosemont.....	60	3	—	—	0	2	0	1	1	14	43
St. Andrew.....	7	0	—	—	1	4	0	0	0	11	15
St. Ann.....	10	2	—	—	0	0	0	0	0	3	5
St. Cunégonde..	15	4	—	—	0	0	0	0	0	4	5
St. Denis.....	14	5	—	—	0	0	0	0	0	1	12
St. Edward.....	3	6	—	—	0	2	0	0	0	2	28
St. Eusèbe.....	20	6	—	—	0	0	0	1	0	0	24
St. Gabriel.....	7	4	—	—	0	2	0	1	0	5	8
St. George.....	3	0	—	—	0	1	0	0	0	2	1
St. Henry.....	48	5	—	—	0	0	1	0	0	11	18
St. James.....	22	1	—	—	0	5	0	1	1	6	20
St. John.....	9	13	—	—	0	0	0	0	0	7	22
St. Jean Baptiste.....	9	16	—	—	0	0	0	0	1	4	27
St. Joseph.....	2	0	—	—	0	1	0	0	0	3	4
St. Lawrence...	20	0	—	—	0	4	0	0	1	17	6
St. Louis.....	23	8	—	—	0	0	0	0	0	3	12
St. Michael....	24	1	—	—	0	1	0	0	0	3	17
St. Mary.....	16	4	—	—	0	0	1	1	0	2	10
St. Paul.....	18	4	—	—	0	1	0	2	0	3	22
Ville-Marie....	2	1	—	—	0	3	0	1	1	17	10
Villeray.....	11	3	—	—	0	4	0	0	1	5	63
Total.....	532	149	1	15	1	51	7	12	16	226	684

Grand total

y wards

Paratyphoid fever	Pemphigus	Measles	German measles	Scarlet fever	Puerperal septicaemia	Trichinosis	Typhoid fever	Chickenpox	Smallpox	Total	Pulmonary tuberculosis	Tuberculosis other forms
0	Unclassified Cases	281	18	34	0	0	0	57	0	435	65	9
0		132	4	7	2	0	1	12	0	194	75	4
0		99	5	13	0	0	0	12	0	195	85	7
0		298	3	35	0	0	2	46	0	461	127	6
0		184	7	22	0	0	1	78	0	349	78	4
0		44	0	14	0	0	1	9	0	90	62	2
0		125	3	17	0	0	0	39	0	221	39	1
0		285	5	76	0	0	0	43	0	490	81	5
0		248	7	42	0	0	1	66	0	421	52	4
1		279	16	12	0	0	1	48	0	411	61	1
1		189	39	46	0	0	0	109	0	410	42	3
0		466	66	75	0	0	1	173	0	870	143	3
0		96	2	17	1	0	1	21	0	173	61	7
1		88	1	15	0	0	1	7	0	138	50	2
0		1,067	15	78	1	0	3	128	0	1,416	142	11
1		183	11	21	0	0	0	47	0	301	118	5
0		81	6	30	1	0	0	26	0	164	50	5
0		104	4	16	0	0	1	75	0	228	58	1
1		86	2	21	1	0	0	29	0	172	52	8
0		265	21	22	1	0	2	81	0	433	87	8
0		153	6	22	1	1	4	68	0	306	57	6
0		240	3	36	0	0	1	63	0	370	69	4
0		55	5	5	0	0	1	16	0	89	65	2
0		54	2	36	0	0	0	52	0	227	74	11
0		142	5	5	0	0	0	53	0	261	111	3
0		258	14	22	0	0	2	85	0	432	79	5
1		145	4	22	1	0	1	51	0	282	64	6
1		53	5	7	0	0	0	31	0	107	47	5
0		105	11	18	0	0	0	37	0	219	101	6
0		242	7	19	0	0	0	44	0	358	70	2
1		283	39	58	0	0	0	77	0	504	64	1
0		118	2	13	0	0	0	25	0	192	45	4
0		159	4	35	0	0	0	67	0	315	89	7
0		57	0	2	0	0	0	23	0	117	56	3
0		543	20	103	0	0	1	175	0	929	160	12
8	3	7,207	362	1,016	9	1	26	1,973	0	12,299	2,679	173

Table VI
Classification by nationalities

Diseases	French Canadians	English Canadians	Jews	Other Nationalities	Total
Whooping cough.....	430	68	9	25	532
Diphtheria.....	135	7	2	5	149
Amoebic dysentery.....	unclassified	cases			1
Bacillary dysentery.....	unclassified	cases			15
Lethargic encephalitis.....	0	1	0	0	1
Erysipelas.....	36	11	0	4	51
Undulant fever.....	7	0	0	0	7
Cerebrospinal meningitis.....	12	0	0	0	12
Purulent ophthalmia.....	13	3	0	0	16
Mumps.....	139	66	6	15	226
Polioomyelitis.....	513	115	20	36	684
Paratyphoid fever.....	2	4	2	0	8
Pemphigus.....	unclassified	cases			3
Measles.....	4,468	1,887	488	364	7,207
German measles.....	176	144	30	12	362
Scarlet fever.....	572	305	70	9	1,016
Puerperal septicaemia.....	7	1	0	1	9
Trichinosis.....	0	0	0	1	1
Typhoid fever.....	24	1	0	1	26
Chickenpox.....	1,306	445	133	89	1,973
Smallpox.....	0	0	0	0	0
Total.....	7,840	4,058	760	562	12,299
Pulmonary tuberculosis.....	1,791	583	101	204	2,679
Tuberculosis other forms.....	126	28	4	15	173
Grand total.....					15,151

Control of Contagious Diseases

1946

Diseases	Control visits			
	Diagnosis	Super- vision of quaran- tined houses	Disin- fections and other visits	Placards
Vincent's angina	0	9	0	0
Whooping cough	124	543	0	105
Diphtheria	165	966	232	120
Amoebic dysentery	0	0	0	0
Bacillary dysentery	4	0	0	0
Lethargic encephalitis	5	0	0	0
Erysipelas	0	41	0	0
Undulant fever	12	1	0	0
Scabies	53	78	0	0
Various infections	1	0	0	0
Skin diseases	63	116	0	0
Wrong addresses	67	0	0	0
Cerebrospinal meningitis	20	16	4	2
Purulent ophthalmia	1	14	0	0
Mumps	56	215	0	0
No infection	699	0	0	0
Poliomyelitis	2,010	1,407	558	10
Measles	1,234	7,257	1	1,210
German measles	95	322	0	0
Scarlet fever	106	1,668	840	196
Puerperal septicaemia	1	4	0	0
Under observation	273	0	0	0
Tuberculosis	2	3,531	327	0
Typhoid fever	97	50	9	0
Chickenpox	484	1,493	0	0
Miscellaneous	640	2,086	4,910	0
Vulvovaginitis	0	0	0	0
Total	6,212	19,817	6,881	1,643

Visiting nurses in their investigations in families have taken 5,030 cultures for laboratory analysis.

Hospitals

Pasteur and Alexandra

Nomenclature	Pasteur	Alexandra
Patients hospitalized	2,226	1,140
Number of days of hospitalization	65,776	19,037
Average sojourn for each patient	29	16
Maximum hospitalization per day	294	96
Minimum hospitalization per day	117	18
Average hospitalization per day	180	52
Deaths during the year 1946	54	10
Deaths during the first 48 hours	22	6
Number of deaths after the first 48 hours	32	4
Proportion of deaths during the first 48 hours to the total of deaths	40%	60%
Ambulance calls	1,852	869
Microscopic examinations	3,569	1,920
Urinalyses	1,838	4,600

Nationality and religion of patients

Pasteur and Alexandra

Nationality	Total		Religion	Total	
	Pasteur	Alexandra		Pasteur	Alexandra
French-Canadians . .	2,144	444	Roman Catholics . .	2,185	624
English-Canadians . .	27	528	Protestants	40	402
Jews	1	71	Jews	0	71
Other nationalities . .	54	97	Other religions	1	43
Total	2,226	1,140	Total	2,226	1,140

Fluctuation of patients

Pasteur and Alexandra

Diseases	In hospital January 1st 1946		Admissions		Total number of patients		Cured		Dead		In hospital December 31st 1946	
	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.
Whooping cough.....	51	5	172	71	223	76	183	71	3	0	37	5
Diphtheria.....	18	1	133	17	151	18	120	14	19	3	12	1
Lethargic encephalitis.....	0	0	1	0	1	0	1	0	0	0	0	0
Cerebrospinal meningitis.....	1	0	6	0	7	0	2	0	5	0	0	0
Purulent ophthalmia.....	2	0	9	1	11	1	9	1	1	0	1	0
Mumps.....	1	1	13	18	14	19	14	18	0	0	0	1
Poliomyelitis.....	0	0	307	158	307	158	274	152	13	6	20	0
Measles.....	39	1	868	337	907	338	899	337	6	0	2	1
German measles.....	0	0	9	3	9	3	9	3	0	0	0	0
Scarlet fever.....	58	38	390	303	448	341	374	304	0	0	74	37
Chickenpox.....	2	1	28	35	30	36	24	35	1	0	5	1
Miscellaneous.....	14	3	290	197	304	200	290	196	6	1	8	3
Total.....	186	50	2,226	1,140	2,412	1,190	2,199	1,131	54	10	159	49

Classification by ages of cases admitted
in 1946

Diseases	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years		20 to 29 years		30 to 39 years		40 to 49 years		50 and over		Total	
	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.
Whooping cough.....	52	27	89	35	30	13	1	0	0	0	0	0	0	0	0	0	0	0	172	75
Diphtheria.....	4	1	61	4	48	10	6	1	8	0	5	1	1	0	0	0	0	0	133	17
Lethargic encephalitis.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Cerebrospinal meningitis.....	0	0	2	0	1	0	0	0	2	0	0	0	0	0	1	0	0	0	6	0
Purulent ophthalmia.....	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
Mumps.....	0	0	4	1	2	1	1	2	2	2	4	9	0	1	0	1	0	0	13	17
Poliomyelitis.....	3	0	58	55	90	36	39	37	49	14	45	7	21	6	2	0	0	0	307	155
Measles.....	82	25	450	159	301	107	14	11	8	13	11	19	2	4	0	0	1	0	868	339
German measles.....	0	0	1	0	3	0	1	0	1	2	3	0	0	0	0	0	0	0	9	2
Scarlet fever.....	3	4	88	71	210	147	75	58	11	11	2	12	0	1	1	0	0	0	390	304
Chickenpox.....	6	3	13	14	5	8	2	1	1	4	1	4	0	0	0	0	0	0	28	34
Miscellaneous.....	55	34	87	52	47	55	14	22	18	7	27	9	16	7	11	3	15	8	290	197
Total.....	213	94	854	391	737	377	153	132	100	53	98	61	40	19	16	4	15	9	2,226	1,140

Classification by ages of deaths in 1946

Diseases	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years		20 to 29 years		30 to 39 years		40 to 49 years		50 and over		Total	
	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.	Past.	Alex.
Whooping cough.....	3	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Diphtheria.....	1	0	10	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0
Lethargic encephalitis.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cerebrospinal meningitis.....	1	0	2	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	5	0
Purulent ophthalmia.....	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Mumps.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poliomyelitis.....	0	0	2	1	0	2	0	1	3	0	7	0	0	2	1	0	0	0	13	6
Measles.....	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
German measles.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarlet fever.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chickenpox.....	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Miscellaneous.....	2	0	1	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	6	1
Total.....	10	0	20	2	10	5	0	1	4	0	7	0	1	2	2	0	0	0	54	10

Division of Communicable Diseases

**Report of the
SECTION OF TUBERCULOSIS
for the year 1946**

by

Doctor LEO LADOUCEUR
Chief of Section

The year 1946 has produced good results and is quite reassuring in spite of the slight increase in the death-rate from tuberculosis which we expected to be lower: 65.34 as compared with 62.2 in 1945.

Staff

The staff is now as follows:

One phtisiologist at part time, who is Chief of the Section;

One phtisiologist at full time;

One nurse, Supervisor;

One nurse and one helper to take the photos and develop the X-ray negatives;

Seven nurses of which three Public Health Nurses;

Four office employees of which one stenographer, two typists and one telephone operator.

Doctor J. M. Filiatrault, specialist in tuberculosis of the lungs and attached to the Tuberculosis Section for the past three and a half years, has been granted a scholarship by the City to qualify in public health at the University of Toronto. This specialized knowledge will improve the efficiency of the section and particularly the central records system.

Central records

Every case of tuberculosis must be reported and recorded in the central records office together with all relative details. The following tables show the information which can be obtained when a central record is well handled.

Table I

Number of new cases of pulmonary tuberculosis (according to the stage of the illness) and of other forms of the disease, for adults and youths, reported in Montréal during 1946

Form of tuberculosis	Pulmonary tuberculosis					Non pulmonary tuberculosis	Total
	Minimal	Moderately advanced	Far advanced	Quiescent	Arrested		
Adult form.....	1,134	793	394	30	270	142	2,763
Juvenile form.....	Stage (1)						
	A	B	C				
	8	20	30	...	...	31	89
Total.....	1,142	813	424	30	270	173	2,852

(1) According to seriousness of lesion.

Table II

Distribution by age groups of new cases of pulmonary tuberculosis and other, reported in Montréal in 1946

Age groups	Tuberculosis		Total
	Pulmonary	Other forms	
Under one year	8	4	12
1 year to 4 years	33	8	41
5 years to 9 years	27	9	36
10 years to 14 years	35	11	46
15 years to 19 years	221	28	249
20 years to 29 years	702	60	762
30 years to 39 years	537	16	553
40 years to 49 years	453	14	467
50 years to 59 years	383	14	397
60 years to 69 years	208	7	215
70 years to 79 years	68	2	70
80 years to 89 years	4	0	4
90 years to 100 years	0	0	0
Total	2,679	173	2,852

Table III

Distribution, by nationality, of new cases of pulmonary tuberculosis and other, reported in Montréal in 1946

Nationality	Tuberculosis		Total
	Pulmonary	Other forms	
French-Canadian	1,791	126	1,917
English-Canadian	583	28	611
Jewish	101	4	105
Others	204	15	219
Total	2,679	173	2,852

Work of nurses

The nurses attached to the Tuberculosis Section made 4,979 visits during 1946 although five of them were missing, helping the hospitals in the poliomyelitis epidemic, on account of the shortage of nurses and the great deal of work caused by the epidemic.

Table IV

Detail of visits to the homes by nurses of the section of tuberculosis in 1946

Nature of visits	Number of visits
New cases	1,659
Subsequent visits	1,833
Sundry visits	1,487
Total	4,979

The Tuberculin Test

4,414 tests (Vollmer patch test) were made in the Well-Baby clinics, including the Municipal X-ray clinic, and among school-children as early as a tuberculosis case is reported in a class. Each positive case is X-rayed as must be done.

The Municipal X-ray Clinic

Since the opening of the municipal X-ray clinic in 1940, the number of X-rays has increased. More and more cases are referred by industries before or after the appointment of an employee when a tubercular disease entails an X-ray.

Table V

Number of persons radiographed for the first time at the Municipal X-ray Clinic; results of examination; number of control examinations; classification according to source of reference—1946

Cases referred by	First examinations								Control examinations	Total
	Positive cases						Negative	Suspected		
	Pulmonary tuberculosis					Other forms				
	Minimal	Moderately advanced	Far advanced	Quiescent	Arrested					
Doctors...	343	197	77	4	116	62	14,763	1,317	4,659	21,538
Nurses....	83	16	7	0	4	4	1,693	255	2,033	4,095
Patient's initiative.	29	8	12	0	4	0	1,210	112	619	1,994
Total....	455	221	96	4	124	66	17,666	1,684	7,311	27,627

Table VI

Classification of new cases of tuberculosis diagnosed at the Municipal X-Ray Clinic 1944-1946

Year	Pulmonary tuberculosis					Non-pulmonary tuberculosis
	Minimal	Moderately advanced	Far advanced	Quiescent	Arrested	
1944....	544	220	58	8	62	73
1945....	401	224	62	5	35	51
1946....	455	221	96	4	124	66

**Analysis of sputum,
culture, gastric lavage and sedimentation**

In order to obtain exact diagnosis for the lesion shown on the X-ray negative, to better direct the tuberculous patient who, after his convalescence, wants to know if he may be allowed to go back to work, we have proceeded with gastric lavage and sedimentation for those who do not expectorate.

I express my thanks to the Superintendent and the employees of the City Laboratories on whom falls this extra work which they accept most co-operatively.

Table VII

Sedimentations	Gastric lavages			Expectorations			Cultures		
	Pos.	Neg.	Total	Pos.	Neg.	Total	Pos.	Neg.	Total
232.....	41	174	215	707	4,167	4,874	14	48	62

**Detection of tuberculosis in Industries
by the Montréal Anti-Tuberculosis League, Inc.**

Under the Chairmanship of Mr. C. O. Monat, the League is carrying on its amazing work of detection. During the past year the League has acquired a building located at 3446 City Hall Avenue, where it intends to install permanently on apparatus for pre-employment X-ray examinations. The following table shows the work performed by the League since June 1943.

Table VIII

Year	Positive cases			Total	Negative	Total
	Tuberculosis					
	Minimal	Moderately advanced	Far advanced			
1943-44....	1,142	201	23	1,366	56,696	58,062
1945.....	1,359	328	49	1,736	106,137	107,873
1946.....	1,439	393	64	1,896	107,843	109,739
Total....	3,940	922	136	4,998	270,676	275,674

Anti-Tuberculosis Organizations

The Royal Edward Laurentian Hospital, the Bruchési Institute and the Sacred-Heart outdoor clinic have worked steadily during the past year. The non-interrupted work of detection performed by the Anti-Tuberculosis League sends them a great number of new patients for whom diagnosis must be specified.

The following table summarizes the work performed by these three organizations.

Table IX

Detail of activities of three voluntary Anti-Tuberculosis organizations in Montréal—1946

Name	Consultations 1st visits	Radio-graphs	Fluoro-scopic examina-tions	Labora-tory	Pneumo-thorax therapy	Visits by nurses
Bruchési Institute.....	9,709	16,908	8,573	6,650	2,667	9,740
Royal Edward Institute..	6,730	17,456	4,182	7,833	4,359	10,852
Sacred-Heart Hospital...	951	2,130	1,496	548	629	291
Total.....	17,390	36,494	14,251	15,031	7,655	20,883

At last, in spite of not being able to give specified figures, if we agree that about 10,000 other X-rays or fluoroscopic examinations were made in the hospitals of Montreal as well as in physician's private offices of Montréal, we come to the conclusive figures shown in this table.

Table X

**Total number of radiological examinations made in Montréal
in Anti-Tuberculosis centres, general hospitals,
and doctors' offices, in 1946**

Nature of examina- tion	Bruchési Institute	Royal Edward Laur. Hosp.	Sacred Heart Hospital	Anti- T.B. League	City Clinic	General Hospitals and doctors	Total
Radiographs.	16,908	17,456	2,130	109,739	27,627	10,000	183,860
Fluoroscopic examinations	8,573	4,182	1,496	....	....	....	14,251
Total.	25,481	21,638	3,626	109,739	27,627	10,000	198,111

It is understood that this figure represents, if not exclusively, at least in greater part, radiographs made, I would say for detection purposes.

B.C.G. and the B.C.G. Clinic

Among the means of preventing tuberculosis is B.C.G. of which the most advantage has not as yet been taken.

Doctor Baudouin has been, in Montréal and in the Province, the pioneer of B.C.G. vaccination. Doctor Frappier, Director of "l'Institut de Microbiologie de l'Université de Montréal," is now in charge of the preparation and the distribution of this vaccine.

Doctor Guilbeault, outstanding pediatrician, medical director of the B.C.G., has given to the administering of the vaccine, the revaccination and the supervision of vaccinated children, scientific precision, which, until now, due to lack of money and personnel, had been impossible to apply.

Since the inauguration of the B.C.G. Clinic in August 1935, 913 babies of tubercular parents or of families where there is a tuberculous contact, have been vaccinated and revaccinated regularly. None of the children vaccinated at the Clinic has since died of pulmonary tuberculosis. The directors of the B.C.G. Clinic are fairly proud of the results obtained to date.

Our organization for detecting cases has reached a state of efficiency of which we may be proud. However, we can provide only inadequate cure. To reach satisfactory results we would need:

- (1) A greater number of beds to hospitalize tuberculous patients;
- (2) Material help for the patient's family for the length of the cure;
- (3) Rehabilitation organizations for the tuberculous who must start all over again to earn his living.

Only when these three are obtained we can hope for more favourable figures.

Division of venereal diseases

**Report of the
DIVISION OF VENEREAL DISEASES
for the year 1946**

by

Dr. C. A. BOURDON, M.P.H.,
Special Officer and Chief of the Health Districts

The Division of Venereal Diseases carried out in 1946, the first year of its existence, the duties assigned to it when it was created, namely case-finding, education, work in co-ordination with the Health Card Section of the Communicable Disease Division, co-operation with the Division of Venereal Diseases of both the federal and the provincial Ministry of Health and Social Welfare, and co-operation with the municipal Police Department.

A staff forcibly small but yet sufficient at this stage, was created during the year. The personnel of the Division was appointed as follows: one steno-typist, one nurse holding a diploma in hygiene, one physician bacteriologist. They worked under the direction of Dr. C. A. Bourdon, Liaison Officer, temporarily in charge as superintendent of the Division.

From February the 7th, 1946, a serologic test for syphilis was routinely carried out on all men who were found in bawdy houses. Such an examination was the object of a recommendation by the Committee appointed to study the problem of Venereal Diseases (June 1945).

The draft of a By-Law pertaining to Rooming houses was submitted to the City Administrators on February the 13th, 1946.

In the course of thirty-two educational meetings organized by the Department of Health in collaboration with various associations, such as the St. Jean-Baptiste Society, the Sacred Heart League, College Alumni, social clubs, etc., nearly 10,000 people received some knowledge on venereal diseases. In each instance, a physician of the Department of Health gave a short talk on venereal diseases illustrated with films and literature was distributed.

In connection with case-finding, 5,403 reports of serologic test for syphilis and 3,775 reports of microscopic examination for gonorrhea were registered (Table I). Furthermore, 788 cases of venereal diseases were brought to our attention.

The public health nurse attached to this Division made 333 visits and interviewed 294 patients at the office.

Two meetings, one in Québec, the other in Montréal were held during the year by the Relation Committee (Army—Province—City).

Cases brought to the attention of the Venereal Disease Division by:

I. The Communicable Disease Division, Health Card Section	258
II. Complaints by telephone, letter or personal report at the office	81
III. The Armed Forces	231
IV. The Ministry of Health and Social Welfare, Division of Venereal Diseases	22
V. Hôpital de la Miséricorde (Crèche)	196
Total	788

I—Communicable Disease Division—Health Card Section.

(1) SYPHILIS

Patients unaware of their infection and brought to treatment through our efforts 50

Patients aware of their infection:

(a) Found under treatment 101

(b) Treatment interrupted or irregular 17

Not seen again, not retraced 8

Total 176

Also 8 doubtful cases.

We reported 20 contacts to the Provincial Ministry of Health, supplying all information that could be of help for their investigation.

(2) GONORRHEA

Patients unaware of their infection and brought to treatment	74
Patients aware of their infection and found under treatment	2
Not seen again, not retraced	6
	<hr/>
Total	82

We reported 16 contacts to the Provincial Ministry of Health with information for investigation.

II—Reports or Complaints from Citizens

Alleged venereal disease	17
Gonorrhea mentioned	17
Syphilis mentioned	16
Both syphilis and gonorrhea mentioned	1
Alleged contact of gonorrhea	20
Alleged contact of syphilis	10
	<hr/>
Total	81

(1) We investigated in 46 cases with the following results:

Found under treatment	10
Brought to treatment	12
No result	24

(2) We referred to the Provincial Division of Venereal Diseases for investigation 32 cases:

Found under treatment	3
Found negative	3
No information	26

III—The Armed Forces

We have received from the Armed Forces reports of 231 cases of venereal diseases. Out of those, 75 reports gave information on facilitation in Montréal. Such information was passed to the Police Department for investigation.

IV—The Ministry of Health and Social Welfare, Division of Venereal Diseases. Twenty-two cases were referred to us:

Venereal Disease unspecified	2
Gonorrhea	12
Syphilis	7
Gonorrhea and syphilis	1
<hr/>	
Total	22

Investigation by our Division:

Located and brought to treatment	7
Located and found negative	2
No result	13
<hr/>	
Total	22

V—Hôpital de la Miséricorde (Crèche)

Repeated cases of gonococcal vaginitis and few cases of urethritis at La Crèche, Hôpital de la Miséricorde, were brought to our attention. An investigation was carried out by physicians and nurses from the Department of Health and a report with recommendations was transmitted to the Provincial Ministry of Health and Social Welfare.

Number of cases:

Girls	186
Boys	10
<hr/>	
Total	196

VI—Deaths by syphilis, registered at the Division of Demography:

Less than one year	20
Age unknown	3
More than one year	111
<hr/>	
Total	134

In the case of deaths by syphilis, report is made to our Division which then is transmitted to the Provincial Division of Venereal Diseases.

Table I

	Serologic Tests for Syphilis					Smears			
	Total	Negative	Positive	Doubtful	% Positive	Total	Negative	Positive	% Positive
A—Department of Health									
Communicable Disease Division, Health Card Section.....	2,637	2,514	118	5	4.47	2,495	2,416	79	3.16
Health Districts.....	1,306	1,302	3	1	0.25	—	—	—	—
Child Hygiene Division									
Prenatal Hygiene.....	170	170	—	—	—	—	—	—	—
Total.....	4,113	3,986	121	6	2.96	2,495	2,416	79	3.16
B—Police Department									
Prisoners' Department:									
Males.....	66	58	5	3	7.57	66	66	—	—
Females.....	1,226	1,017	173	36	14.11	1,214	1,085	179	10.62
Grand Total.....	5,405	5,061	299	45	5.53	3,775	3,567	258	6.83

Table II

Cases of venereal diseases reported in Montréal, 1946¹

Reported by	Syphilis			Gonorrhea
	Primary and Secondary	Others	TOTAL	
Clinics	398	1,352	1,750	3,391
Physicians	297	786	1,083	528
Armed Forces	264	481	745	254
Total	959	2,619	3,578	4,173

(1) These figures were supplied by the Division of Venereal Diseases, Québec Ministry of Health and Social Welfare. The area allotted to Montréal includes all suburban municipalities on the Island, except those West of Dorval plus Longueuil, Montréal South and St. Lambert.

Division of child hygiene

DEPARTMENT OF HEALTH

DIRECTOR'S OFFICE

Dr. J.N. Laporte, D.P.H.
Asst.-Director and
Superintendent

DIVISION OF CHILD HYGIENE

ADMINISTRATION

Dr. L. Dubrouil, M.P.H.
Asst. Superintendent
14 office clerks

7 organized Health districts
(1 English to be organized)
1 Special officer and Chief of
the Health districts
1 Special officer and assistant-
Chief of the Health districts
6 Districts chiefs

Medical Personnel

21 Medical inspectors
(full-time)
16 Consulting physicians
(part-time)

Hygiene Education

Public lectures
Health teaching in the schools
Films
Literature
Posters, etc.

Maternal and Infant
Hygiene

Prenatal clinics: 6
Well-Baby and preschool
clinics: 56
Immunization
Vaccination
Tuberculin test
Open-air Well-baby clinics 2
Supervision of private hos-
pitals and maternities and
boarding-houses for
children: 2 nurses
Boarding-houses for
children: 26
Private hospitals and
maternities: 17
Practical hygiene lectures
to pupils of higher grades
Wartime day nurseries
(Federal-Prov.plan) 4

School Medical Inspection

10 Medical examination of pupils
Periodic and routine
224 catholic schools - 98827 pupils
47 protestant " - 26430 "
48 independent " - 11221 "
Tot.319 schools (1944-45) 136478 pupils
20 Communicable diseases control
30 Home visits by nurses
40 Health education
50 Selection of pupils for Sight-
saving classes
60 First-aid courses
70 Sanitary inspection of schools
Medical examination for teachers
5355 teachers
Hearing tests by means of the
audiometer no 4-A by
2 special nurses
Summer camps: Medical inspection
of children before departure
for camp

Visiting Nurses
Section

1 Head-nurse
3 Asst. Head-nurses
7 District supervisors
118 Visiting nurses
Major objectives:
10 Health education
20 Communicable diseases
control
30 School and Clinic work
40 Health talks and
demonstrations
Mothers' classes
50 Home visits and follow-up

Mental Hygiene Section

School and clinic work. Home visits
and follow-up
One mental hygiene clinic (Laurier)
4 psychiatrists
8 psychologist-nurses
1 stenographer

Dental Hygiene Section

Inspection in the schools and oral
hygiene
Municipal dental clinics 8
" Orthodontia clinic
(Université de Montréal) 1
Talks
1 Chief of section
12 dentists (4 part-time)
1 technician
9 nurses
1 stenographer

Nutrition Section

1 Nutritionist
1 stenographer

**Report of the
DIVISION OF CHILD HYGIENE
for the year 1946**

by

Dr. J. N. LAPORTE, D.P.H.,
Superintendent

The report of the work of the division of Child Hygiene for the year 1946 is divided into two principal parts:

FIRST PART

I—MATERNAL, INFANT and PRESCHOOL HYGIENE

1. Maternal hygiene:

6 municipal prenatal clinics.

2. Infant hygiene (0-1 year) and preschool hygiene (1-6 years).

- (a) 56 Well-baby and preschool clinics;
- (b) 2 open-air clinics;
- (c) practical hygiene lectures;
- (d) inspection of private boarding-houses for children and private hospitals and maternities.

II—SCHOOL HYGIENE and MEDICAL INSPECTION OF SCHOOLS

- 1. Medical examination of pupils.
- 2. First aid.
- 3. Medical examination of teachers.
- 4. Summer camps.

III—NUTRITION

IV—MENTAL HYGIENE

SECOND PART:

- I. Vaccination against smallpox.
- II. Tuberculin tests.
- III. Distribution of literature.

APPENDIX:

- I. Report of the dental hygiene section.
- II. Report of the activities of the nurses of the Department of Health.

FIRST PART

I. MATERNAL HYGIENE

Prenatal clinics

The following table indicates the results obtained in 1946 in the six municipal prenatal clinics.

Table I

Number of municipal prenatal clinics						6
Number of conferences						312
Number of prenatal cases registered	carried over cases					127
	new cases	Month of pregnancy when admitted				
		Under 4th 143	4th-5th 102	6th-7th 86	8th-9th 27	358
Number of	consultations with doctor					1,053
	blood pressures					917
	urinalyses					831
	Wassermann tests					168
	positive					—
Home visits	negative					168
	ante partum					1,347
	post partum					729
total						2,076
Group classes (mothers) with demonstrations:	number					134
	attendances					1,092

The following table indicates the number of prenatal cases registered at "L'Assistance Maternelle" and in the prenatal clinics of Montréal hospitals.

Table II

	Prenatal cases registered	Month of pregnancy when admitted						Wassermann tests		
		Under 4th	4th-5th	6th-7th	8th-9th	In 10th	Number	Pos.	Neg.	
L'Assistance Maternelle.....	1,282	141	259	381	449	52	1,282	10	1,272	
Hospitals:										
Maternité Catholique.....	859	38	106	216	499	...	859	9	850	
Miséricorde.....	2,179	...	...	...	2,179	...	...	...	...
Notre-Dame.....	286	63	79	46	62	36	286	18	268	
Ste-Jeanne-d'Arc.....	187	36	64	65	22	...	187	...	187	
Ste-Justine.....	381	115	101	113	52	...	381	1	380	
St-Luc.....	163	12	25	60	66	...	163	2	161	
Catherine Booth.....	421	100	200	75	46	...	421	1	420	
Homoeopathic.....	91	78	5	6	2	...	...	...	...
Jewish General.....	90	33	37	16	4	...	90	...	90	
Herbert Reddy Memorial.....	295	136	97	50	12	...	295	3	292	
Royal Victoria.....	1,696	578	516	380	219	3	3,076	41	3,035	
St. Mary's.....	342	20	256	52	14	...	342	2	340	
Montreal General Western Division.....	...	...	...	...	...	...	409	...	409	
TOTAL.....	8,272	1,350	1,745	1,460	3,626	91	7,791	87	7,704	

Table III

Maternity cases in Montréal — 1946

Number of confinements in 1946: 26,635					Rate per 1,000 population: 26.4 (1)			
Number of beds and pre-natal cases in Montréal Hospitals	Number of beds				Number of cases			
	Private	Semi-private	Public	Total	Private	Semi-private	Public	Total
1° Hospitals:								
Maternité catholique.....	5	28	163	196	31	101	727	859
Miséricorde.....	628	2,013	...	2,641	519	1,660	...	2,179
Notre-Dame.....	25	15	10	50	728	783	239	1,750
Ste-Jeanne-d'Arc.....	9	20	5	34	339	895	18	1,252
Ste-Justine.....	15	10	15	40	937	57	260	1,254
St-Luc.....	12	14	10	36	274	608	238	1,120
L'Aide à la Femme.....	...	...	...	...	...	...	107	107
Herbert Reddy Memorial.	8	14	10	32	119	609	256	984
Catherine Booth.....	5	22	16	43	154	866	411	1,431
Homoeopathic.....	6	14	5	25	132	536	103	771
Jewish General.....	3	22	16	41	263	777	79	1,119
Montreal General (Western Division).....	18	...	...	18	409	...	...	409
Royal Victoria.....	28	40	39	107	721	994	1,361	3,076
St. Mary's.....	11	23	10	44	248	767	353	1,368
2° Private Hospitals:								
Beaulac.....	...	12	...	12	...	555	...	555
Bellevue.....	...	10	...	10	...	345	...	345
Belvédère.....	...	10	...	10	...	437	...	437
Pinard Enreg.....	...	12	...	12	...	595	...	595
Ste-Anne.....	...	12	...	12	...	91	...	91
St-Denis.....	...	17	...	17	...	810	...	810
St-Rédempteur.....	...	13	...	13	...	76	...	76
Ste-Thérèse.....	...	12	...	12	...	283	...	283
Mount Royal.....	...	6	...	6	...	34	...	34
Total.....	773	2,339	299	3,411	4,874	11,879	4,152	20,905
3° Home cases by private physicians.....	...	...	...	...	4,868	...	...	4,868
4° Number of indigent cases handled by private physicians and paid by:								
L'Assistance Maternelle...	...	...	...	...	...	...	862	862
Grand total.....	773	2,339	299	3,411	9,742	11,879	5,014	26,635

(1) This rate is calculated on the number of confinements done in Montréal.

2. INFANT HYGIENE (0-1 year) and PRESCHOOL HYGIENE (1-6 years)

WELL-BABY and PRESCHOOL CLINICS

The 56 municipal clinics continued operating during the year. Besides, 28 independent clinics, of which 19 French directed by "Les Gouttes de Lait paroissiales" and 9 English directed by the Child Welfare Association, continued operating in the City limits of Montréal. An annual subsidy of \$8,500.00 was granted to them by the City.

Table IV

**This table indicates the general results of the work done
in the clinics during the year 1946**

	Department of Health		Child Welfare Association		Les Gouttes de lait paroissiales	
	Infant	Pre-school	Infant	Pre-school	Infant	Pre-school
Number of clinics.	56	56	9	9	19	19
Number of children registered..	13,928	14,576	1,343	2,229	6,159	4,389
Number of deaths (0-1 year) among registered babies.	27	...	4	...	2	...
Percentage of deaths compared to the number of children registered.	0.2	...	0.4	...	0.03	...
Number of children attending clinic.	71,245	35,976	5,783	6,016	51,849	14,885
Average number of consultations per child.	5.1	2.5	4.3	2.7	8.4	3.4
Home visits.	21,011	19,341	2,774	5,395	12,741	7,803

OPEN-AIR CLINICS

Two open-air Well-Baby clinics were opened during the months of July and August: one in Lafontaine Park and the other in St. Helen's Island. A doctor was in attendance every day at Lafontaine Park and on picnic days only at St. Helen's Island.

Table V

Camps open for a period of	2 months
Number of consultations (doctor)	187
Weighings	204
Dressings	678
Vaccinations	1,308
Revaccinations	148
Certificates	938
Examination of children entering school in September	46

PRACTICAL HYGIENE LECTURES

Practical hygiene lectures and demonstrations were given during the school year 1945-1946 to pupils of higher grades of St-Nom de Marie School. 25 pupils attended these lectures.

Four practical hygiene lectures have also been given by a nurse to a group of 24 pupils of the 10th and 11th grades of the Montréal High School for Girls.

Inspection of Children’s Boarding-Houses and Private Hospitals and Maternities for the year 1946

The supervision of children’s boarding-houses and private hospitals and maternities, has been carried out as indicated in the table which follows:

Table VI

I—Children’s Boarding-Houses							
	Number	Children					
		In boarding-houses			Deceased		
		Legiti- mate	Illegi- timate	Total	Legiti- mate	Illegi- timate	Total
A—Boarding-houses with li- cense (of which 4 were cancelled during the year).....	25	175	31	206	0	0	0
License permits pending (of which 10 were can- celled during the year).	11	...	...	...	...	...	...
B—“Foster Homes” L’Assistance aux familles.	268	95	80	175	0	0	0
Catholic Welfare Bureau.	75	18	41	59	0	0	0
Jewish Child Welfare Bureau.....	27	12	5	17	0	0	0
Protestant Foster Home Centre.....	168	36	67	103	0	0	0
S.S. St-Stanislas.....	13	5	0	5	0	0	0
The Children’s Aid Society of Montréal...	53	0	31	31	0	0	0
Total (of which 317 were cancelled)	604	166	224	390	0	0	0

Table VI (continued)

II—Private Hospitals and Maternities

Number of	Private hospitals and maternities (of which 1 was cancelled)			19	
	Patients	Maternity cases	Married	3,002	
			Unmarried	417	
			Total	3,419	
		Medicine and surgery			791
		Total			4,210
	Births	Legitimate			2,833
		Illegitimate			364
		Total			3,197
	Deaths	Babies	At full term	Legitimate	79
				Illegitimate	30
			Premature	Legitimate	32
				Illegitimate	2
		Total			143
		Adults	Maternity and hospital cases			69

Work of the Nurses

	Number of	
	Visits	Investigations
a) Boarding-houses	1,091	414
b) Private hospitals and maternities	370	1,365
c) Special	106	100
Total	1,567	1,879

II—SCHOOL HYGIENE AND MEDICAL INSPECTION OF SCHOOLS

I. MEDICAL EXAMINATION OF PUPILS

The work of "Medical Inspection of Schools", Primary and Junior High, Catholic and Protestant, French and English, and in a certain number of independent or private schools, was accomplished in the course of the school year 1945-1946, as indicated in the following tables:

Table VII

Number of schools, classes and pupils and average number of schools and pupils for each doctor and nurse, 1945-1946

		Catholic	Protes- tant	Independ- ent	Total
Number of	schools	218	46	56	320
	classes	3,177	820	492	4,489
	pupils	95,798	25,957	13,565	135,320
Average per				Schools	Pupils
	Doctor			13.2	5638.3
	Nurse			3.1	1342.7

Table VIII
General Report
1945-1946

I—Work of Physicians					
Number of			July and August (1)	School year	Total
	Visits to schools	Routine		5,343	5,343
		Regular		1,906	1,906
		Total		7,249	7,249
	Routine examinations (2)			13,167	13,167
	Periodic physical examinations: (3)				
	pupils examined (4)		1,808	62,029	63,837-47.1%
	a) normal		1,069	36,055	37,124-58.1
	b) sick or presenting one or several defects		739	25,974	26,713-41.8
	defects found (teeth excepted)		1,174	40,252	41,426
	notices to parents		215	8,624	8,839
	parents present at the examination		1,402	3,040	4,442
II—Work of nurses:					
Number of	Visits	to schools		34,381	
		to homes		48,064	
	Examinations			591,754(5)	
	Pupils	excluded as suspected cases of contagious diseases		4,830	
		taken to dispensaries		49	
	Interviews with parents in school			4,328	
	Various treatments			28,836	

- (1) This report indicates the total examinations made during July and August 1945 of all children who entered school for the first time at the beginning of September.
- (2) These examinations comprise the special cases referred or kept under observation.
- (3) The periodic physical examination consists of a complete physical examination of each pupil which is made at definite periods, that is every two or three years.
- (4) This total (63,837) shows that 47.1% of all pupils in the schools have received a complete physical examination.
- (5) This total shows that each pupil has been examined by a nurse an average of 4.3 times during the school year for uncleanliness, pediculosis, skin diseases, etc.

Table IX

Results of physical and routine examinations—1945-1946

I—Periodic physical examination:				
	July and August	School-year	Total	% (1)
Number of pupils examined	1,808	62,029	63,837	
a) Normal	1,069	36,055	37,124	58.1
b) Sick or presenting one or several defects	739	25,974	26,713	41.8
Number of defects found:				
Vision	10	4,504	4,514	7.1
Eye disease	45	1,295	1,340	2.0
Hearing	...	236	236	0.3
Ear disease	5	703	708	1.1
Nasal obstruction	133	3,509	3,642	5.7
Tonsils	347	7,372	7,719	12.1
Lymphatic system	274	8,457	8,731	13.7
Goitre	8	195	203	0.3
Skin	34	2,461	2,495	3.7
Lungs	12	1,945	1,957	3.0
Heart	34	1,631	1,665	2.5
Digestive system	5	150	155	0.2
Genito-urinary system	13	542	555	0.8
Orthopedic	7	1,014	1,021	1.6
Nervous system	25	479	504	0.7
Mental condition	1	108	109	0.1
Malnutrition	221	5,651	5,872	9.2
Total number of defects	1,174	40,252	41,426	

(1) Percentage based on the number of children examined.

Table IX (continued)

Results of physical and routine examinations—1945-1946
(continued)

II—Routine examination (during school year 1945-1946):			
Number of cases discovered among school children (at school or at home):		Total	% (1)
a) Contagious diseases	1. Diphtheria	67	0.04
	2. Scarlet fever	434	0.3
	3. Measles	3,095	2.2
	4. Chicken-pox	967	0.7
	5. German measles	243	0.3
	6. Mumps	144	0.1
	7. Whooping cough	118	0.08
b) Parasitic diseases	1. Pediculosis	8,034	5.9
	2. Scabies	101	0.07
c) Various skin diseases		14,053	10.3
d) Uncleanliness		6,691	4.9

(1) Percentage based on the number of pupils attending school.

CONTROL EXAMINATION AND CORRECTION OF PHYSICAL DEFECTS

School year 1945-1946

The control examination or re-examination is made by the physicians and the nurses to discover among the pupils who were given a "Notice to Parents", those whose defects were corrected.

This re-examination is made by the nurses each month, and those treated are shown to the doctor who examines the degree of correction of the defects. At the end of the school year a general re-examination is made in order to estimate the complete results obtained in the course of the school year.

Those pupils who had a notice undergo re-examination if the notice was not annulled by the correction of the indicated defects, or if the pupils had not in turn undergone a new periodic physical examination.

The results of these re-examinations, showing the correction of physical defects obtained in the course of the school year 1945-46, are to be found in Table X which follows:

Table X

Table showing the number of corrections of physical defects obtained and established by re-examinations made in the course of the school year 1945-1946

I—Number of defective pupils:

(a) re-examined	16,332
(b) treated and cured	5,741—35.2%
(c) under treatment	1,939—11.8%

II—Number of defects corrected:

	Mentioned on notices	Cured by operation or glasses	Cured by treatment	Under treatment	Not treated
Adenoids	4,569	1,130	472	246	2,721
Enlarged tonsils	8,301	1,863	782	393	5,263
Defective vision	4,996	2,394	345	317	1,940
Eye disease	534	40	147	88	259
Hearing	258	3	78	65	112
Ear disease	418	8	178	69	163
Lymphatic system	4,399	13	1,337	257	2,792
Goitre	52	1	10	23	18
Skin	298	..	186	43	69
Lungs	279	..	169	57	53
Heart	671	..	181	226	264
Digestive system	61	4	24	12	21
Genito-urinary system	244	24	74	53	93
Orthopedic	229	..	56	67	106
Nervous system	255	..	68	85	102
Malnutrition	2,111	..	663	383	1,065
TOTAL	27,675	5,480	4,770	2,384	15,041
Teeth	7,048	375	1,997	468	4,208*

*The figure 4,208 represents only the number of children who, after receiving a notice at the medical examination, were treated by their dentist or in a clinic.

We must add that 15,184 children were treated in municipal clinics in 1946.

2. FIRST AID LECTURES

During the year 1946 lectures on First Aid have been given by our doctors and nurses in 81 schools of the Catholic School Commission ; 2,387 candidates have successfully passed the examination.

Two hundred and fifty-two members of the Police Department, officers and cadets, have undergone a First Aid Examination under the supervision of the doctors of the Division of Child Hygiene.

3. MEDICAL EXAMINATION OF TEACHERS

In virtue of a by-law adopted by the Provincial Department, all teachers should have an annual physical examination—for the new teachers an X-ray examination—to have the right to teach in the schools under the control of the Department of Public Instruction.

The staff of the Child Hygiene Division which is doing this work wishes to express his appreciation to the principals, religious and lay teachers and employees of the Catholic and Protestant schools for their fine co-operation.

The number of examinations made during the school year 1945-1946 is 5,284, of which 867 by the family physicians and 4,417 by the school physicians.

The following table indicates the observations made:

Table XI
Medical examination of teachers and employees of Catholic and Protestant schools, and of a few independent schools
School year 1945-46

	Catholic and independent schools			Protestant schools			Grand total of the examinations		
	First examination	Annual examination	Total	First examination	Annual examination	Total	First examination	Annual examination	Total
Personnel examined	Principals, directors and ass'ts.....	24	239	263	...	44	24	283	307
	Special professors.....	11	49	60	1	11	12	59	71
	Male teachers (lay).....	14	774	788	16	134	30	908	938
	Male teachers (religious).....	207	472	679	...	...	207	472	679
	Female teachers (lay).....	63	820	888	72	676	140	1,496	1,636
	Female teachers (religious).....	194	1,088	1,282	...	...	194	1,088	1,282
	Janitors and other employees.....	18	181	199	59	113	77	294	371
	Total.....	536	3,623	4,159	148	977	684	4,600	5,284
	Employees examined	434	3,014	3,448	115	816	549	3,830	4,379
	Defective.....	102	609	711	33	161	135	770	905
Examined by	School physicians.....	490	3,165	3,655	47	715	537	3,880	4,417
	Family physicians.....	46	458	504	101	262	147	720	867
	Total.....	536	3,623	4,159	148	977	684	4,600	5,284

Control of vaccination against smallpox

Number of employees	Non-vaccinated		14	35	49	11	1	12	25	36	61								
	Vaccinated within	25 years...										483	211	2,787	2,998				
		15 years...														260	230	1,208	1,438
		7 years...																		183	109	343	452
less than 7 years	186	98	175	273															
Vaccinated without success					1	11	51	62											
Defects					Lungs (other than tuberculosis)...		23	14	67	81									
	Heart...		44	29	158	187													
	Liver...		1	30	116	146													
	Digestive system...		13	41	284	325													
	Teeth	caries...	26	40	189	229													
		pyorrhoea...	5	6	10	16													
	Visual acuity	with glasses...	203	157	1,203	1,360													
		without glasses...	201	115	631	746													
		wearing glasses...	337	268	1,968	2,236													
	Defective hearing acuity		39	55	156	211													
	Nervous system		4	6	60	66													
	Kidneys	urinalysis...	36	25	159	184													
		a) albumen... b) sugar...	7	5	26	31													
	Family history		13	65	1	66													
	Tuberculosis	Personal history following X-Ray	Classification:	2	5	5	10												
a) Incipient...															
b) Mod. advanced lesions...															
c) Very advanced lesions...			1	1													
d) Negative or normal...			124	532	88	620													
Under observation...		7	17	14	31														
Total...		133	554	108	662														

The notes which show the defects encountered are based on the answers of the personnel to the questions submitted and on the physical examination made by the physician. He satisfies himself with the discovery that an organ is not normal and he does not endeavour to make a precise diagnosis of an existing disease. He makes no comment nor does he draw any conclusion or suggest any recommendation, except when he is concerned with one of the communicable diseases included in the group of those which are governed by provincial by-law.

Following the agreement made, the School Commissions decide alone the measures to be taken in each separate case, after receiving advice from their proper medical advisors.

4. SUMMER CAMPS

In the latter part of the month of June and during July and August 1946, the doctors and nurses of the Division of Child Hygiene made a medical examination of 3,837 children before departure for various summer camps.

The medical examination consists particularly in detecting communicable diseases, skin diseases, parasites, etc., and in eliminating all suspected cases. Each child must show evidence of successful vaccination, if not he is refused permission to depart for camp.

Height and weight calculations are taken for each child and recorded on the admission card. This information will allow the different organizations to note the good effects on these children, following their stay in the country.

The number of children for the different summer camps is as follows:

Table XII		Children examined
Summer camps		
1° "Les Grèves"		1,599
2° "Le Grillon"		261
3° "Ste-Jeanne-d'Arc"		450
4° "Notre-Dame-de-Montréal"		257
5° "Notre-Dame-de-Bonsecours"		112
6° "Tyndale House"		79
7° "Fresh Air Fund"		602
8° "Association des guides"—Scouts and Guides (boys and girls)		477
Total		3,837

III—NUTRITION

A nutritionist is on the staff of the Division of Child Hygiene.

During 1946, lectures and talks on nutrition were given as follows:

Table XIII

I—For the Department of Health

(a) To mothers in the prenatal clinics	18
Average attendance	13.6
(b) To the nurses of the Department of Health	3
Average attendance	19.0
(c) Special lectures:	
in colleges, schools, orphanages and Home	
Economics Schools	12
Average attendance	142.4
(d) Papers for periodical "Le Foyer Rural"	4
(e) Visits, inquiries in orphanages and boarding-	
houses for children	30

II—Other organizations

Lectures on nutrition:

In co-operation with "L'École Supérieure de	
Pédagogie Familiale", Outremont	20
Average attendance	48

III—Other activities

(a) School contest on nutrition

A school contest on nutrition has been organized in March 1945 in the Catholic schools of Montréal; 229 schools took part in the contest and the entries of the pupils of 216 schools were accepted for correction. Due to errors or misinterpretation of the rules, the other 13 schools were not admitted in the contest.

Of the 216 schools who registered in the contest:

121 were schools for girls and
95 for boys.

The competitors numbered 35,000.

The delay in presenting the report is due to the big amount of work it represented to compute such a number of papers. The correction and compilation of the entries were completed in 1946 and the contest closed on April 13 by a prize giving.

Considering the educative nature of questions in the contest, the papers presented by the pupils have a remarkable value: 26,121 pupils (74.63%) obtained a mark superior to 50%. Of this number 901 obtained 100% and 3,857 over 90%.

A sum of \$700.00 was donated in prizes: \$500 by the Department of Health of the City of Montréal and \$200 by "Le Bureau des Oeuvres Sociales Scolaires". This sum was divided in such a way to encourage and reward the greatest number possible of pupils.

"Le Bureau des Oeuvres Sociales Scolaires" gave out illustrations to be coloured (menus, etc.) at a cost of \$1,200.00.

(b) Report of the Nutrition Campaign 1942-1945:

The nutrition section collaborated in the preparation of the French and English report for the year 1942-45 Nutrition campaign in Montréal.

(c) Educative campaign in the schools:

In co-operation with the School of Home Economics of the Catholic School Commission of Montréal, this section inaugurated in September 1946 a Food preservation campaign in all Home Economics classes of the Catholic schools of Montréal. The report of this campaign will only be given out in 1947.

IV—MENTAL HYGIENE SECTION

The following table shows the results of the work done by four psychiatrists and nine psychologist nurses in the schools, for the school year 1945-1946.

Table XIV
Report of the psychometric tests made in the schools

Number of schools visited			64	
Number of pupils	Examined		4,029	
	Normal	a) I.Q. 90-100	911	
		b) I.Q. 80-90 Slow-minded	938	
		Total	1,849	
	Abnormal	a) Unsteady	9	
		b) Backward and unsteady	36	
		c) Backward	2,135	
		Total	2,180	

Classification of backward cases

Backward cases	Total		2,171	Recommen- dations
	1. Borderline		1,253	Auxiliary classes
	2. Mental debility	superior	738	
		inferior	156	Technical teaching (sensorial)
	3. Feeble minded		24	

Table XV

Report of Laurier Mental Hygiene Clinic for the year 1946**I—Number of cases—boys and girls**

Old	136
New	461
<hr/>	
Total	597

II—Comparison with past years

1941	349
1942	511
1943	534
1944	491
1945	617
1946	597

III—Cases referred by:

Catholic School Board:

Father Lussier's office	32
Victor-Doré School	14
Directors and principals	38

Juvenile Court	84
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Catholic Federated Charities:

L'Assistance aux Familles	18
St-Vincent-de-Paul	1
Institut Bruchési	2

Hospitals:

St-Jean-de-Dieu Hospital	4
Children's Memorial Hospital	58
Royal Victoria Hospital	8

Table XV—(continued)**III—Cases referred by: (continued)**

Others	8
Social Welfare Department (Municipal)	22
Société d'Adoption et de Protection de l'Enfance	5
Others (doctors, parents, school nurses, private organizations, etc.)	303
Total	597

IV—Problems

Mental development	243
Behaviour problems	247
Nervousness	16
Before adoption	1
School failure	35
For placement in institutions	52
Others	3
Total	597

V—Distribution of intelligence

Normal	79
Slow-minded	60
Unsteady	60
Backward, backward and unsteady:	
Border-line	121
Mental debility (superior)	89
Mental debility (inferior)	48
Feeble minded	76
Idiocy	17
Children who were not tested	47
Total	597

VI—Recommendations

Emmémie-Tavernier School	56
Victor-Doré School	6
Auxiliary classes	74
Special institutions	54
Baie St-Paul	2
Industrial school	4
Dispensaries	5
Advice	396
<hr/>	
Total	597

VII—Number of visits and inquiries

School visits	20
Home visits	291
To clinic	62

VIII—Interviews at the clinic 67

S E C O N D P A R T

I. VACCINATION AGAINST SMALLPOX

The following table shows the number of children by age groups (0-14 years) who have been vaccinated against smallpox in 1946 in the Municipal Well-Baby and Preschool clinics and at Lafontaine Park.

Table XVI

Age groups				Total
0-1 year	1-4 years	5-9 years	10 years and over	
1,083	2,324	9,665	380	13,452

II. TUBERCULIN TESTING

Detection of tuberculosis among children by Vollmer Patch Test has continued in Well-Baby clinics. This method easier in its application, is well accepted by the public.

On December 31st, 1946, this test was made in fifty-one municipal clinics, it was also made in a certain number of schools.

The Division of Child Hygiene, in co-operation with the Tuberculosis Section, hold propaganda meetings for different associations and in schools of the city.

Table XVII

Tuberculin Testing

Number of conferences	1,358
Number of tuberculin tests	3,193
Number of positive reactions	483
Number of negative reactions	2,543
Number of cases who did not return for reading	167

III. DISTRIBUTION OF LITERATURE

A certain number of publications, circulars and posters, have been distributed by the Division of Child Hygiene.

Circulars (bilingual)

"Height and Weight"	23,000
"Immunization against diphtheria"	15,400
"Cleaning of diapers"	14,250
"Artificial feeding"	13,000
"Advice to parents concerning the care of the child after the extraction of teeth"	4,000
"Breast feeding"	13,000
"Prevent blindness in your children"	1,750

“Child Nutrition and resistance to disease”		
	(French)	10,625
	(English)	2,750
“Letters from the Director to mothers on the occasion of the birth of a child”		
	(French)	9,250
	(English)	1,875
“Letters from the Director to mothers when the child is six months old”		
	(English)	300
“Letters from the Director—Advice to mothers”		
	(French)	7,750
	(English)	2,250
“Why you should preserve your teeth and how to do it”		
	(French)	33,200
	(English)	3,600

Publications

“Hygiène de l'enfant au premier âge”	16,575
“Prenatal hygiene” (bilingual)	400

During the course of the year 1946, the doctors and nurses gave their efficient aid to the Divisions of Contagious Diseases and Medical Control.

I am pleased to stress the fine spirit which reigned among the members of the personnel. Allow me to felicitate and thank them for the devotion which they showed in the accomplishment of their duties.

Division of Child Hygiene

**Report of the
SECTION OF DENTAL HYGIENE
for the year 1946**

by

**Dr. R. R. LALONDE, L.D.S.,
Chief of the Section**

The activities of the section of dental hygiene consist of:

- I. Dental inspection in the schools;
- II. Municipal dental clinics;
- III. Municipal orthodontic clinic.

The actual personnel is composed of the chief of the section and nine full-time dentists; they work either at the clinics or do dental inspection in the schools at specified hours; four part-time dentists are also operating in our clinics from 9 to 12 A.M. A specialist is in charge of the orthodontic clinic. They are assisted by nurses.

I. DENTAL INSPECTION IN THE SCHOOLS

With the programme already described in our annual report for 1945, sponsored by the Health Department of the City in co-operation with the Dental Hygiene League of the Province of Québec Inc., the joint campaign of nutrition and dental hygiene was pursued in the Montréal schools.

The following table shows the results of this educational campaign and dental examination at which 65,417 children were examined during the school term 1945-46, and 72.9% of them were found with dental caries.

Table XVIII

			Schools			Total
			Catho- lic	Protes- tant	Inde- pendent	
Schools visited			259	44	17	320
Pupils in the schools			114,166	18,772	2,382	135,320
Lectures			1,446	247	77	1,770
Attendance at lectures			55,250	7,374	1,087	63,711
Visits to schools			1,115	159	27	1,301
Children examined			56,765	6,601	2,051	65,417
Number	of cases	Caries	41,984	4,390	1,336	47,710
		Normal	14,781	2,211	715	17,707
	of	Carious teeth	146,006	14,675	5,244	165,925
		Prophylaxis to be done	46,349	4,653	1,277	52,279
Notices sent to parents			37,975	4,644	1,292	43,911

II. MUNICIPAL DENTAL CLINICS

There are nine municipal dental clinics since the new dental clinic DeLorimier is open — October last — in which are accepted all pre-school or school children who cannot afford to consult their own dentist. This year we give clinics at the “Institut des Sourds-Muets” and at the “Institution des Sourdes-Muettes” three days weekly. When the child examined at the clinic is accompanied by the parents, this gives an opportunity to the dentist to advise them on the care of his teeth. This education of parents brings good results.

Table XIX**Report of Municipal Dental Clinics**

Number of children treated	15,184	
Treatments: extraction	7,916	
prophylaxis	4,596	
filling	3,086	
temporary	793	
dressings	6,829	
Total number of treatments	30,008	
Number of teeth extracted: permanent	4,771	
temporary	16,974	21,745
<hr/>		
Number of teeth filled: permanent	4,673	
temporary	443	5,116
<hr/>		
Number of cases completed	1,435	

III. MUNICIPAL ORTHODONTIC CLINIC

The orthodontic clinic, which opened in 1940, is under the direction of Dr. Paul Geoffrion, Professor of Orthodontia at the faculty of Dentistry of the Université de Montréal.

As in the past, are accepted in the clinic only children suffering from facial deformities and dental malocclusion, and for whom parents are unable to pay such treatment.

Table XX**Report showing the work done at the Orthodontic Clinic
for the year 1946**

Number of children treated	106
New cases	37
Number of cases completed	41
Examined	173

N.B.—Polio epidemic has prevented a certain number of patients to be treated in our municipal clinics; 12% less than last year.

Report of the
NURSING ACTIVITIES OF THE DEPARTMENT OF HEALTH
for the year 1946

by

Miss MARIA ROY, R.N.,
 Chief nurse

The following table shows the results of the work done by the nurses of the Department of Health during the year 1946:

Total number of nurses in the Department of Health 172

Division of Child Hygiene:

Chief nurse, assistants and Health district nursing supervisors	11
Visiting nurses in Health districts	120
Mental hygiene	9
For hearing tests in schools with the audiometer . .	2
For the supervision of children's boarding houses, private hospitals and maternities	2
Dental hygiene section	10

Division of communicable diseases:

Visiting nurses (one of whom is nursing supervisor)	2
Tuberculosis section (one of whom is nursing supervisor)	9

Division of Medical control	2
---------------------------------------	---

Division of Venereal diseases	1
---	---

Division of Sanitary inspection	1
---	---

To Universities for Post graduate course	3
--	---

I—Home visits, Number and distribution:

COMMUNICABLE DISEASES:

In the seven Health districts in operation	12,400	
Others	2,834	
Venereal diseases	333	
		————— 15,567

Tuberculosis:

ACTIVE CASES:

First visits	1,659	
Subsequent visits	1,833	
Other visits	1,487	
Made by nurses of the Health districts	90	
		————— 5,069
Prenatal	2,076	
Prenatal (in parishes where there is no prenatal clinic)	1,124	
Babies and preschool children	40,352	
Babies and preschool children (in parishes where there is no Well-baby clinic)	5,266	
Children's Boarding houses and private hospitals and maternities	3,446	
School children (1945-1946)	48,064	
For adults	6,019	
Mental hygiene (1945-1946)	373	
		—————
Total visits		127,356

II—Other work:

COMMUNICABLE DISEASES:

Throat swabs re: diphtheria	6,394	
Throat swabs re: typhoid and paratyphoid	52	
Specimen for culture in amoebic and bacillary dysentery	52	
		—————
Total		6,498

MATERNAL AND CHILD HYGIENE:

Group classes (mothers) and demonstrations	134
Attendance at group classes	1,092

SIX PRACTICAL HYGIENE LECTURES AND DEMONSTRATIONS
TO PUPILS OF HIGHER GRADES:

Number of groups	2
Attendance	49

SCHOOL MEDICAL INSPECTION (1945-1946):

Number of pupils examined	591,754
Number of treatments	28,836
Interviews with parents	4,328
Children taken to dispensaries, hospitals and dental clinics	49
First Aid Courses (see Dr. J. N. Laporte's report, page 151).	

MENTAL HYGIENE (1945-1946):

Psychometric tests:

In the schools (1945-1946)	4,029
At the clinic	597

FIELD EXPERIENCE IN HEALTH DISTRICTS FOR PUBLIC
HEALTH NURSING STUDENTS FROM MCGILL AND
MONTRÉAL UNIVERSITIES 50

Days of work in the hospitals given by our nurses during poliomyelitis epidemic	1,104
Number of hours	8,832

Division of food inspection

DEPARTMENT OF HEALTH

DIVISION OF FOOD INSPECTION

Dr A.-J.-G. Hood, D.M.V.
superintendent

ADMINISTRATION

Dr J.-A. Brien, M.P.H. Assistant-superintendent
J.E. Ritchie, office manager
9 office employees

Section no 1
MILK

Inspection
in the city

G. Bouchard, B.S.A.
Chief inspector

Group A
8 inspectors

General inspection of establishments and vehicles for transport and delivery. Special inspections and complaints. Lacto-sedimentation upon reception of milk. Temperature control upon arrival and delivery. Supervision of all products received and sold. Collections for chemical analysis: during delivery, in stores, schools and other places. Approval of permits for dairies and "special milk" establishments and in baby hospitals, hospitals, schools, and military depots.

25 pasteurization plants
22 special milk establishments

Group B
8 inspectors

Pasteurization. Control of all the operations of pasteurization, washing and sterilization of apparatus and equipment. Verification and registering thermometers, control and supervision of products received and sold. Resazurin and other tests. Bacteriological controls for the different products. Collection of samples of different products offered for sale. Bacteriological controls in dairies and "special milk" establishments and in baby hospitals, hospitals, schools, and military depots.

Inspection
in the country

Dr A. Martel, D.M.V.
Chief inspector

10 inspectors
veterinarians

Inspection of farms
9 districts
4994 farms

Supervision of health of producers and their herds. Control of mastitis, Bangs disease and tuberculosis. Investigation of contagious diseases. Inspection of stables, dairies and equipment. Supervision at milking time. Collection of samples. Lacto-filtration. Plans of farms. Inspection of ice and water supplies. Inspection of milk transport trucks. Education of producers and appropriate advice. Supervision of the entry of milk or cream from unauthorized producers.

Section no 2
MEATS

Dr J.L. Archambault, D.M.V.
Chief inspector

8 inspectors
veterinarians

4 stations
for the inspection of
meats upon arrival in
the City of Montreal

8 inspectors
1 veterinarian
7 sanitary inspectors

8 districts
General inspection of: butchers and grocers, butchers, cooked meat, pickled tongue and food products establishments, fish, poultry and ice dealers, wholesale butchers, cold storages, smoke-houses, public markets; supervision of delivery of meats, etc. Supervision of the quality and storage of boneless meats. Approval of permits for licenses (1530 establishments)

Reception and control of
destruction of condemned meats
1 inspector

One private
abattoir in
the city

255 abattoirs
in the country
approved for the
shipment of
dressed carcasses
to the city of
Montreal.
1 inspector

Supervision of
ice cutting

Section no 3
Food establishments

L.G. Forté, C.S.I.
Chief inspector

10 inspectors

10 districts
Inspection of restaurants, dining-rooms, in hospitals, hotels, grocery stores, confectioneries, pastry bakers, fruit and vegetable stores, soft drinks manufacturers, sundry food itinerant food vendors, concerning sanitary conditions. Approval of permits for licenses. (1245 vehicles) (6295 establishments)

Weight of bread and
inspection of bakeries
(74 establishments)

**Report of the
DIVISION OF FOOD INSPECTION
for the year 1946**

by

Doctor A. J. G. HOOD, D.M.V.,
Superintendent

SECTION No. 1 — MILK INSPECTION

Table I

Summary of the work performed in this section

Establishments	12,212
Inspections	28,316
Cows examined	92,744
Samples of milk, cream and ice cream collected for chemical and bacteriological analysis	15,730
Various examinations of milk, cream and ice cream	122,251
Gallons of milk examined	978,008
Gallons of milk and various by-products consumed per day	126,560
Gallons of milk confiscated	16,543
Quarts of cream confiscated	83
Complaints	44
Actions taken	19
Action in court for judgment	—
Action dismissed	—
Condemnations	19
Written notices	20,754

I—SUB-SECTION OF INSPECTION OF MILK IN THE COUNTRY

Table II
Inspection of milk producers

Inspections:	
Dairy score cards	4,676
Special	9,721
At milking	905
At railway stations	50
Total	15,352
Cows:	
Number examined	83,342
Clean	74,772
Tuberculin tested	83,342
Stables:	
Number	4,676
Clean	4,589
With concrete floor	4,645
With a ventilation system	4,655
Whitewashed entirely	4,421
Dairies:	
Number	4,676
Clean	4,529
Refrigeration:	
With ice	2,042
Producers having electrical refrigeration	2,634
Interdiction maintained	—
Miscellaneous:	
Written notices	11,282
Written notices by letter from the office	4,907
Producers interdicted	362
Cows examined re: mastitis:	
Herds	46
Cows examined	907
Cows condemned	17

Table III

Inspection of cream producers

Inspections:	
Dairy score cards	522
Special	530
At milking	66
At railway stations	1
	<hr/>
Total	1,119
Cows:	
Number examined	9,402
Clean	9,435
Tuberculin tested	9,402
Stables:	
Number	522
Clean	505
With concrete floor	509
With a ventilation system	512
Whitewashed entirely	510
Dairies:	
Number	522
Clean	505
Refrigeration:	
With ice	423
Producers having electrical refrigeration	98
Interdiction maintained	1
Miscellaneous:	
Written notices	859
Written notices by letter from the office	—
Producers interdicted	61

Table IV
Observations and improvements in the inspection of dairy farms

	1930	1940	1944	1945	1946
Producers visited	4,558	4,979	4,869	4,994	5,198
Cows examined	63,672	81,153	83,549	87,824	92,744
Cows found clean	54,695	74,658	74,683	78,869	84,207
Stables with cement floor	3,524	4,669	4,804	4,829	5,154
Whitewashed stables	3,942	4,833	4,799	4,921	4,931
Clean stables	3,915	4,826	4,761	4,847	5,094
Producers having a dairy	4,174	4,958	4,841	4,994	5,198
Producers whose dairy is maintained in a clean condition	3,760	4,862	4,740	4,777	5,034
Producers having ice	3,987	4,724	3,801	3,063	2,465
Producers having electrical refrigeration . . . . .	....	168	1,067	1,927	2,732
Written notices	5,860	4,384	13,274	15,255	17,048
Producers interdicted	192	448	441	531	423

Table V

Progress in the methods and equipment of milk producers

	1930 %	1940 %	1944 %	1945 %	1946 %
COWS:					
Clean	85.90	92.00	89.39	89.80	90.77
STABLES:					
Whitewashed	89.93	97.07	98.56	98.53	94.86
Clean	89.83	96.92	97.78	97.25	98.
With concrete floor	80.86	93.77	98.66	98.68	99.13
MILK-ROOMS:					
Clean	90.08	97.65	97.35	95.67	96.84
REFRIGERATION:					
With ice	91.48	94.88	78.06	61.33	47.43
Electrical refrigeration .....	....	....	21.91	38.59	52.56

Table VI
Classification of dairy cows from the point of view of the existence of mastitis in the herd

Group	Examination	Result	Instructions which must be complied with	
			Cows	Milk
No. 1—Healthy cows.	1. Strip cup test. 2. Chemical test. 3. Physical examination.	Negative. Negative. Negative.	No restriction.	No restriction.
No. 2— (a) Suspicious cows. (b) Slightly affected cows.	1. Strip cup test. 2. Chemical test. 3. Physical examination. 4. Bacteriological examination.	Absence of pus, flakes or stringy milk. Negative or slight reaction. Few nodules, not painful. Negative (streptococci and staphylococci).	No restriction.	No restriction.
	1. Strip cup test. 2. Chemical test. 3. Physical examination. 4. Bacteriological examination.	Absence of pus, flakes or stringy milk. Slight or doubtful reaction. Fibrous nodules, painful. Absence of streptococci and staphylococci.	Must be placed in one end of stable.	May be sold for human consumption.

No. 3—Positively affected cows.	1. Strip cup test.	Absence of pus but presence of flakes or stringy milk.	Must all be isolated immediately from the balance of the herd. We recommend the sale of these animals for slaughter.	Must not be sold for human consumption unless pasteurized.
	2. Chemical test.	Positive reaction in one or more quarters.	Permission to keep these animals can only be granted for the current year.	May be used for young animals on the farm.
	3. Physical examination.	Fibrous nodules, painful. Atrophy of one or more quarters.		
	4. Bacteriological examination.	Presence of streptococci or staphylococci or both.		
No. 4—Severely affected cows.	1. Strip cup test.	Presence of pus.	Must all be isolated immediately from the balance of herd and sold for slaughter.	Must not be sold for human consumption or used for young animals.
	2. Chemical test.	Marked reaction.		
	3. Physical examination.	Marked fibrosis, painful nodules with or without swelling; open abscesses. One or more quarters atrophied or dry.	If pure bred animals and during the gestation period, permission may be granted to breeders to keep these animals on condition that they are not giving milk and shall be kept in a separate stable.	
	4. Bacteriological examination.	Presence of streptococci or staphylococci or both.		

REMARKS:—The classification of the herd is only temporary and will be changed according to results obtained upon subsequent test.

Bacteriological examinations will only be made when deemed necessary by the Department.

One positive result obtained upon examination is sufficient to indicate in which group each cow is to be classed.

Examinations are only made one month after calving and not less than one month before.

Table VII
Detection of mastitis cases in milch cows—Special milk (or cream) “By-Law No. 891”

Number of herds and cows examined				Classification by group				
Herds	Total of cows in herds	Cows examined	Untested cows (dry or recently freshened)	No. 1 Healthy cows	No. 2a Suspicious cows	No. 2b Slightly affected cows	No. 3 Positively affected cows	No. 4 Severely affected cows
46	1,228	907	321	66	229	352	243	17

2—SUB-SECTION OF MILK INSPECTION IN THE CITY

Group A: from its entry into the city up to delivery

Table VIII

Places to be visited and inspections

Places to be visited	7,014
Waggons and trucks	1,371
Inspections	6,461

Details of inspections:

Milkmen	341
At the railway stations	239
In dairies	1,417
In groceries	371
In restaurants	1,011
In dining-rooms	258
In markets	194
In stables	—
In private houses	40
In various places	1,345
Special	1,245

Results:

Empty cans examined	66,434
Empty cans confiscated	1,177
Can tops (lids) confiscated	476
Notices for poor milk	108
Written notices (various)	3,706
Actions taken	19
Condemnations	19
Action dismissed	—
Action in court for judgment	—

Table IX
Examinations of milk and cream

Acidity tests	505
Sediment tests	38,737
Temperatures taken	30,217
Babcock tests	226
Physical examination (color, tests and smell)	43,923
Other examinations	8,643
Total of examinations	122,251
Gallons examined	978,008
Confiscations (in gallons):	
Milk	16,543
Cream	21
Total	16,564

Group B: of pasteurization and special milk establishments

Table X
Establishments and inspections

Pasteurization establishments	34
(a) Milk	26
(b) By-products	8
Special milk establishments (raw)	20
Inspections	5,384
(a) in pasteurized milk establishments	3,457
(b) in special milk establishments	188
(c) in other institutions	1,739

Table XI

Milk consumed in Montréal
(daily)

1—Pasteurized milk and by-products (in gallons):

Milk.....	112,363
Cream.....	5,771
Ice cream.....	7,166
Total.....	125,300

2—Special milk (raw) (in gallons):

Milk.....	1,260
Cream.....	—
Total.....	1,260
Grand total.....	126,560

Table XII

Collection of samples for laboratory analysis

1—For bacteriological analysis:

Milk	7,236
Cream	486
Chocolate flavored dairy drink	405
Ice cream mix	225
Ice cream	350
Sterilization test for dairy utensils	826
Drinking water	360
River water for ice cutting	38
Water from wells and springs	60
Total	9,986

2—For chemical analysis:

Milk: In schools	—
On the street	2,340
In hotels	193
In groceries	717
In dairies	972
In various places	1,407
Submitted by citizens	15
Total	5,644
Cream: On the market	115
Submitted by citizens	—
Total	115
Grand total	5,759

Table XIII

Butter fat test of milk sold in Montréal

	Percentage of butter fat	Samples	
		Number	Percentage
Milk upon delivery:	3.0 & —	97	3.85
	3.1	89	3.54
	3.2	230	9.14
	3.3	393	15.62
	3.4	551	21.90
	3.5	469	18.64
	3.6	255	10.14
	3.7	124	4.93
	3.8	75	2.98
	3.9	34	1.35
	4.0 & +	199	7.91
	Total	2,516	3.46
Milk in stores:	3.0 & —	10	.57
	3.1	13	.75
	3.2	84	4.83
	3.3	248	14.25
	3.4	537	30.86
	3.5	514	29.54
	3.6	234	13.45
	3.7	74	4.25
	3.8	15	.86
	3.9	1	.06
	4.0 & +	10	.58
	Total	1,740	3.448
Milk in schools:	3.0 & —	6	2.35
	3.1	2	.79
	3.2	14	5.49
	3.3	38	14.90
	3.4	70	27.45
	3.5	76	29.80
	3.6	34	13.34
	3.7	10	3.92
	3.8	5	1.96
	3.9	—	—
	4.0 & +	—	—
	Total	255	3.438
Grand total		4,511	3.454

Table XIV

Daily consumption of milk in Montréal
Comparative table: 1937 to 1946

Years	Gallons received daily			Gallons sold daily			Percentage		Consumption per capita (pint)
	Pasteurized milk (1)	Special milk	Total	Pasteurized milk (1)	Special milk	Total	Pasteurized milk (1)	Special milk	
1937	75,422	4,064	79,486	67,537	3,943	71,480	94.48	5.52	0.645
1938	75,642	4,084	79,726	66,189	3,934	70,123	94.39	5.61	0.623
1939	82,454	3,495	85,949	69,305	3,180	72,485	95.61	4.39	0.636
1940	85,625	3,534	89,159	71,868	3,339	75,207	95.56	4.44	0.6633
1941	91,459	3,673	95,132	77,081	3,547	80,628	95.60	4.40	0.7167
1942	96,830	3,710	100,540	83,804	3,661	87,465	95.82	4.18	0.7556
1943	112,025	3,758 $\frac{1}{4}$	115,783 $\frac{1}{4}$	98,783	3,715 $\frac{1}{4}$	102,498 $\frac{1}{4}$	96.38	3.62	0.8631
1944	114,896	3,362	118,258	102,471	3,287	105,758	96.90	3.10	0.8713
1945	122,411	1,986	124,397	109,221	1,979	111,200	98.20	1.80	0.75
1946	128,216	1,305	129,521	112,363	1,260	113,623	98.89	1.11	0.744

(1) The total of pasteurized milk for the years mentioned above includes pasteurized milk, special pasteurized milk, pasteurized Jersey milk, homogenized pasteurized milk, chocolate dairy drink, fermented milk and fermented buttermilk.

SECTION NO. 2 — MEAT INSPECTION

Table XV

Establishments visited and inspections made

Kind of establishments:	Establishments	Inspections
Markets.....	7	1,241
Butcher stalls.....	1,131	19,535
Fish stalls.....	29	507
Poultry dealers.....	50	1,471
Packing houses.....	9	249
Grocers.....	2	193
Cooked meat dealers.....	27	626
Cold storages.....	5	98
Fruits and vegetables.....	—	8
Sundry manufacturers.....	10	455
Abattoirs.....	4	2,395
Ice dealers.....	295	891
Provisions.....	3	66
Specials.....	30	1,554
Total.....	1,602	29,289

Samples collected for analysis:	841
(a) chemical.....	322
(b) bacteriological.....	395
(c) physical.....	124

Eggs:	
Candled.....	75,744
Condemned.....	335

Animal bites: (dogs and others)	
Cases reported.....	223
Control visits.....	549

Food poisoning:	
Cases reported.....	41
Investigations and visits.....	126

Legal proceedings:	
Written notices.....	1,649
Actions taken.....	47
Actions in court for judgment.....	18
Suspended sentence.....	1
Condemnations.....	28
Complaints.....	176

Table XVI
Inspection and confiscation of carcasses

Places	Inspections	Confiscations
1. Private abattoirs:		
Cattle.....	7	...
Calves.....	4,728	3
Sheep and lambs.....	2,149	...
Hogs.....	5,633	...
Total.....	12,517	3
2. Inspection stations:		
Cattle.....	...	...
Calves.....	20,160	58
Sheep and lambs.....	1,282	3
Hogs.....	52,956	36
Total.....	74,398	97
3. Commission stores:		
Cattle.....	...	...
Calves.....	23,563	180
Sheep and lambs.....	2,680	10
Hogs.....	41,267	59
Total.....	67,510	249
Grand total.....	154,425	349

N.B.—The inspection at the public abattoirs is performed by the inspectors of the Federal Government.

Table XVII
Meat and other foodstuffs condemned
(in pound)

	Private abattoirs	Inspection stations	Commis- sion stores	Markets, butchers, etc.	Total
Beef.....	304	453	...	17,117	17,874
Poultry.....	...	1,950	2,029	5,556	9,535
Veal.....	224	3,321	8,541	3,731	15,817
Fish.....	...	...	...	23,075	23,075
Sundry meats.....	...	462	152	28,099	28,713
Mutton.....	6,936	120	347	1,291	8,694
Pork.....	3,103	24,213	15,723	6,840	49,879
Sundry foodstuffs...	...	...	...	14,836	14,836
Total.....	10,567	30,519	26,792	100,545	168,423

N.B.—Meat and foodstuffs mentioned above have been condemned for the following reasons: spoiled, mouldy, slimy, sour, dirty as well as meat affected with disease and calves too young.

**SECTION No. 3 — INSPECTION OF RESTAURANTS,
DINING-ROOMS, GROCERY STORES, ETC.**

Table XVIII

Establishments visited and inspections

Kind of establishments:	Establish- ments	Inspec- tions
Candy stores	2,953	3,000
Restaurants	625	8,482
Dining-rooms	687	6,241
Grocery stores	1,211	8,369
Confectioneries	51	942
Pastry-shops	93	2,633
Bakeries	63	2,277
Fruit and vegetable stores	202	2,645
Beverage manufacturers	20	412
Sundry manufacturers	148	1,625
Special inspections . . . . .	...	5,458
Total	6,053	42,084
Delivery vehicles	1,118	1,275

Confiscations:

Utensils	490
Fruits (in lbs.)	26,269
Vegetables (in lbs.)	260,137
Various foodstuffs (in lbs.)	96,830
Total (in lbs.)	383,236

Table XIX

Collection of samples for laboratory analysis and procedures

Samples collected for analysis:

Chemical	74
Bacteriological	753
Physical	253
Total	1,080

Sundries:

Complaints	119
Written notices	3,154
Actions taken	225
Convictions	210
For judgment	6
Suspended sentences	4
Actions dismissed	5

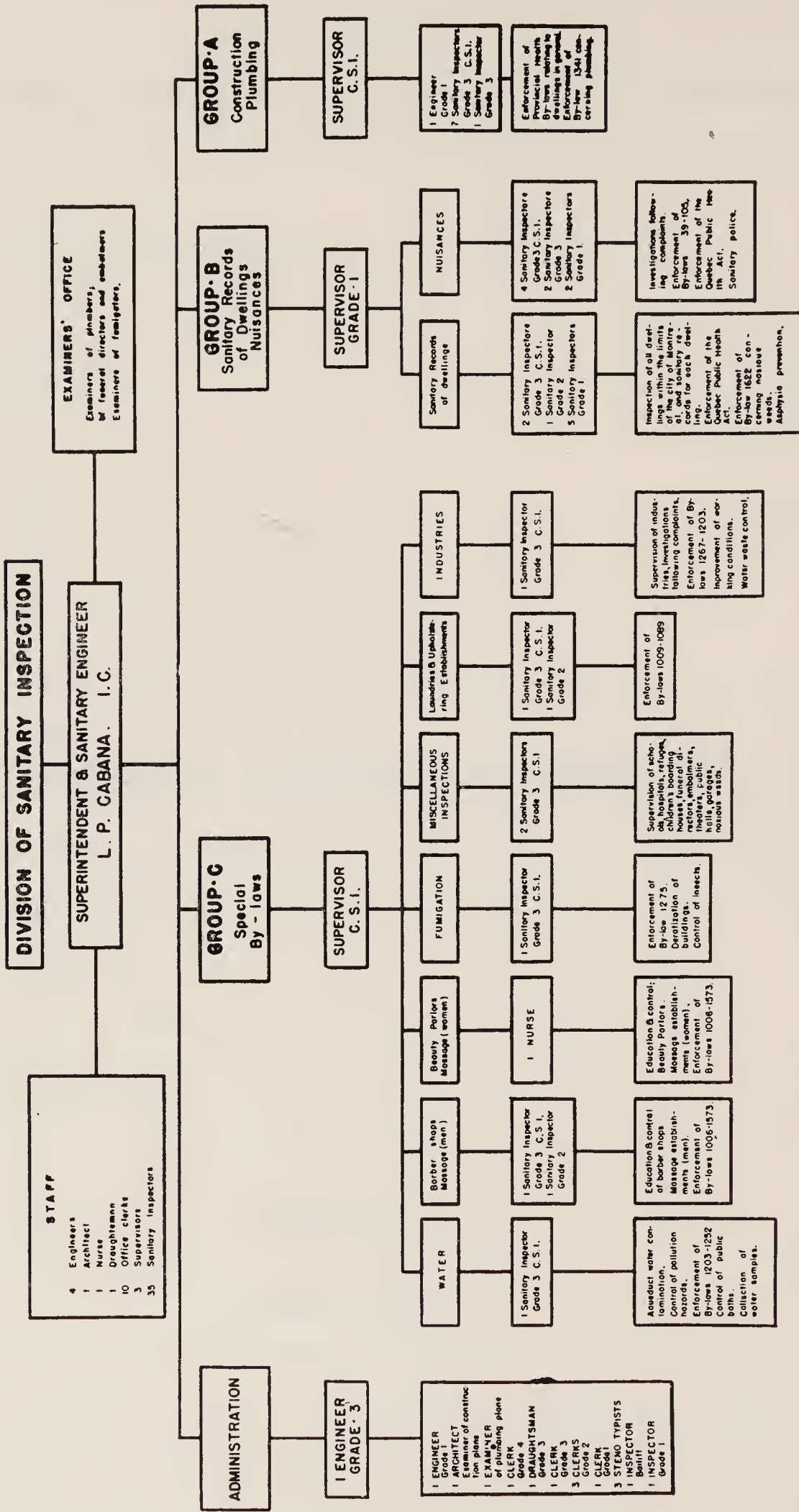
Table XX

Weight of bread

	Inspections	Loaves weighed	Loaves confiscated
In bakeries	142	20,869	955
In grocery stores . . . . .	...	...	...
Total	142	20,869	955

Division of sanitary inspection

DEPARTMENT OF HEALTH 1946



Report of the
DIVISION OF SANITARY INSPECTION
for the year 1946

by

Mr. L. P. CABANA, P.Eng.,
Superintendent and Sanitary Engineer

The year 1946 has not brought any marked increase in the personnel of the Division of Sanitary Inspection; an engineer for the supervision of construction and plumbing and a clerk for the research of the addresses of landlords and tenants, were added to our Division; on the other hand two inspectors, Mr. C. Barrette and Mr. J. Prigent, were pensioned after several years of services. Seven employees have passed successfully the examinations of the C.S.I. for sanitary inspectors, which brings to 24 their total number up to date. They are the inspectors R. Beaudoin, E. Leduc, J. A. Blanchette, C. E. Bourgault, A. Dompierre, E. Leclerc, B. Ranger. We have organized in 1946, a draughting office to facilitate propaganda work, the preparation of forms, etc. This office has been appreciated by the other divisions of the Department of Health by its collaboration with them.

This year again the shortage of material and labour have delayed considerably the repairs to buildings required to eliminate unhealthful conditions. In spite of the construction of 2,486 new dwellings, the general conditions of housing have not improved much in 1946, and it was not possible for us to enforce the evacuation of the 1,118 dwellings which to our knowledge are in a great state of dilapidation.

The activities of our division have nevertheless greatly increased during the past year. We note indeed from the following figures an increase of 1,713 construction or alteration permits and of 1,100 plumbing permits over the preceding year. The licence

permits of all categories also show an increase of 1,124; notices sent out and plumbing tests number respectively 13,582 and 1,933 more than the previous year.

The control of beauty parlors and the enforcement of the provincial sanitary regulations relating to hairdressing establishments were undertaken with renewed vigor. Massage establishments were the object of a close supervision in collaboration with the Police Department. In wading pools, the analysis revealed a lower *B. coli* index, thereby insuring a water of higher quality. It must be noted however that the number of bathers decreased greatly during the summer due to the polio epidemic; all the wading pools were closed from the 7th of August 1946 on. (Page 211.)

The sanitary records of dwellings were completed for Ville-Marie ward, the parties concerned have been notified of the defects or nuisances ascertained by our inspectors. There are in this ward 1,581 families and 1,997 roomers living in 1,632 dwellings and 283 rooming houses, accounting for a total population of 10,070 persons; 68 dwellings are unfit for human habitation and there is .97 room per person.

Our activities have furthermore been extended to a new field: the destruction by chemical products of noxious weeds found on City owned vacant lots. In collaboration with the Department of Public Works, and with the help of a mechanical sprayer, which was lent to us by the Provincial Ministry of Agriculture, we have succeeded in treating 3,783 vacant lots with 2,4-D, sodium chloride, etc. (pages 198, 199, 200, 201.) In the month of May, a float was prepared for the flower parade, and our sanitary inspectors took part in the march past on this occasion (page 197).

The operations of the year were compiled following 4 principal groups and have required 167,240 inspections during 1946. The comparative figures of 1945 and 1946 in the following table show the increase in the work of this Division.

I—Administration.

II—Group “A”—Construction and plumbing.

III—Group “B”—Sanitary records of dwellings and nuisances.

IV—Group “C”—Special by-laws.



FLOAT — FLOWER PARADE

4 May 1946 — Sanitary Inspection — Department of Health, Montréal

MAUVAISES
HERBES

NOXIOUS
WEEDS

TROUVÉES DANS
LES LIMITES DE
LA VILLE DE

FOUND WITHIN
THE LIMITS OF
THE CITY OF

MONTRÉAL 1946

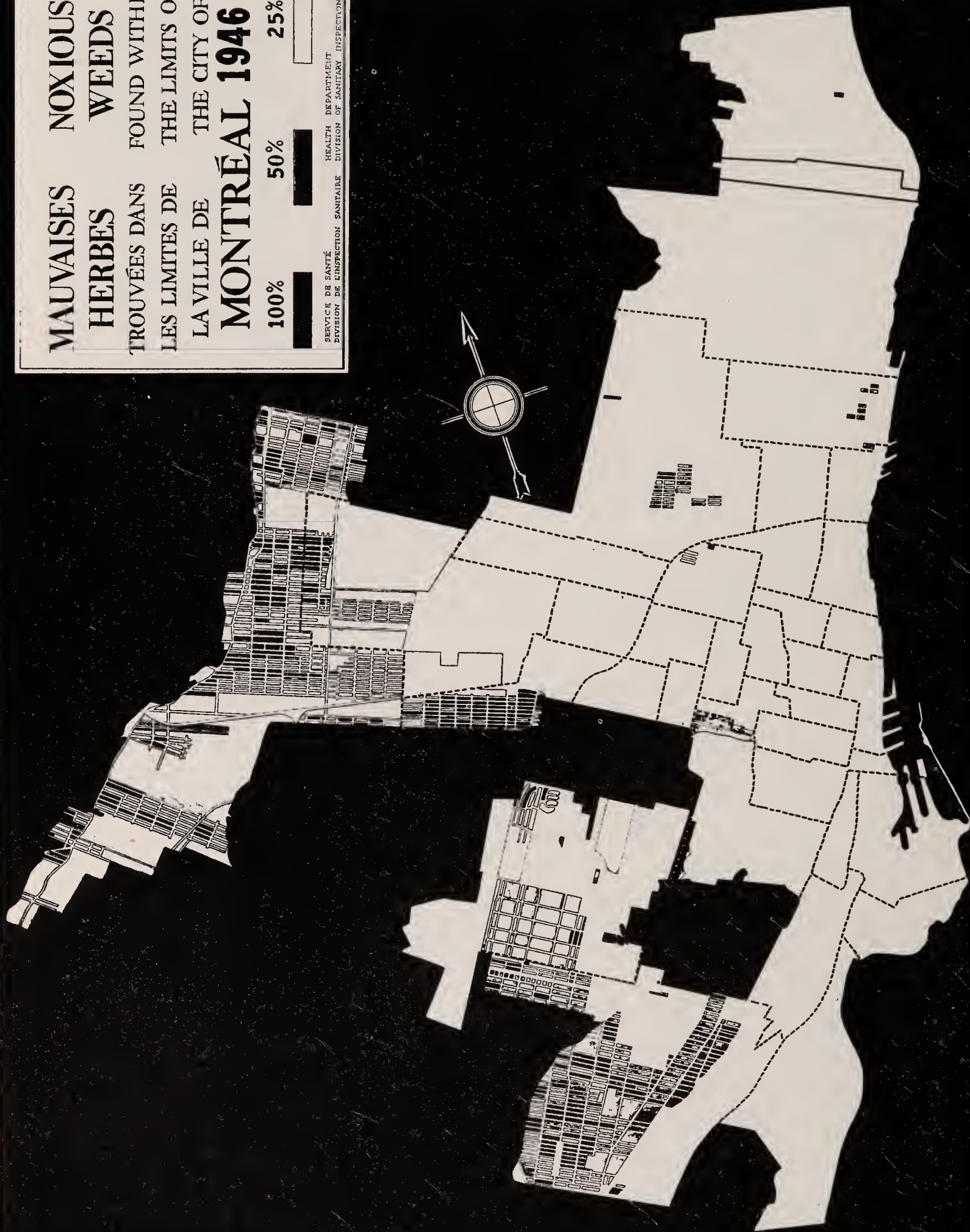
100%

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25%

SERVICE DE SANTÉ
DIVISION DE L'INSPECTION SANITAIRE

HEALTH DEPARTMENT
DIVISION OF SANITARY INSPECTION



**MAUVAISES
HERBES**

DÉTRUITES DANS
LES LIMITES DE

LA VILLE DE

MONTRÉAL 1946

100%

50%

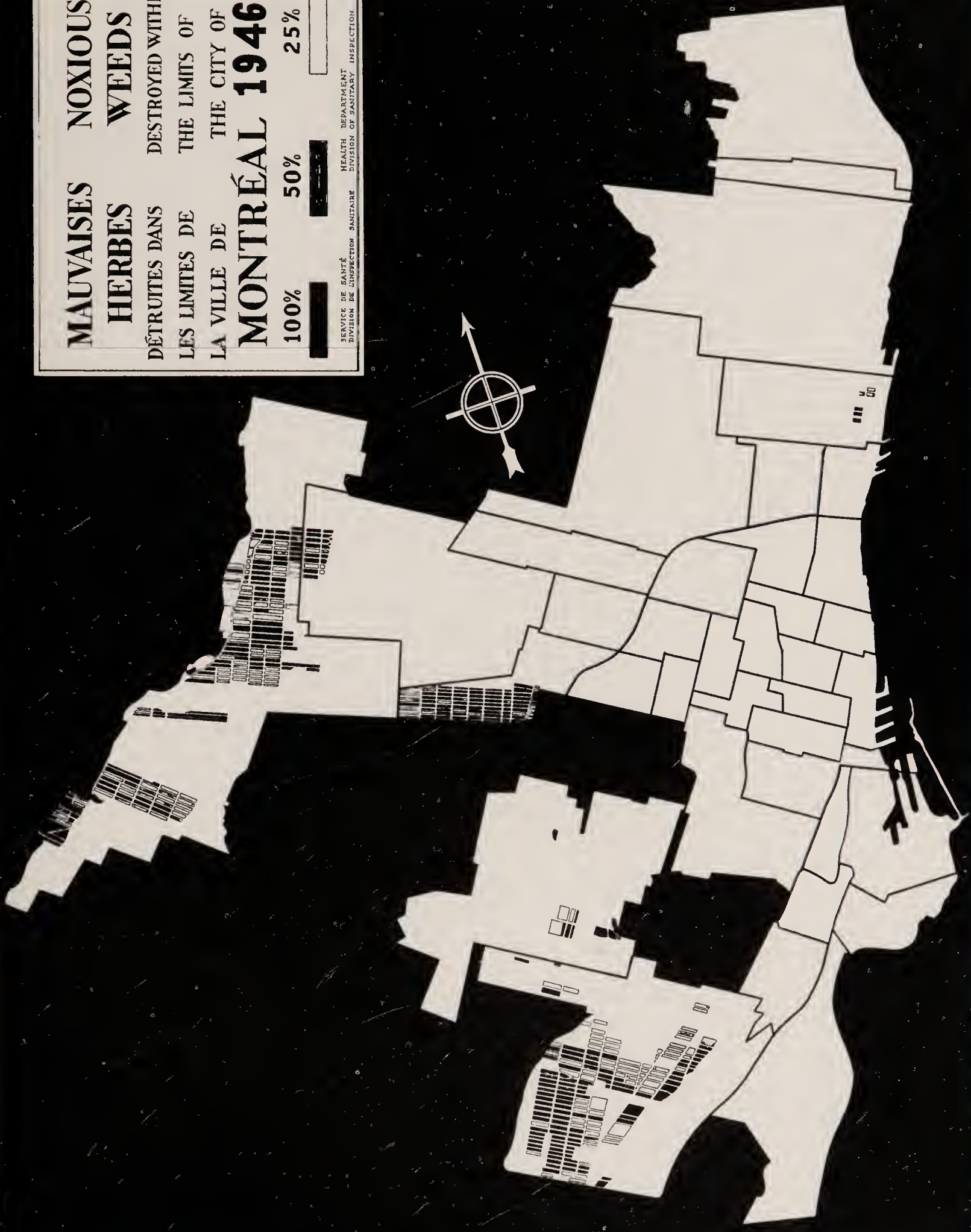
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DÉTRUYED WITHIN
THE LIMITS OF

THE CITY OF

SERVICE DE SANTÉ
DIVISION DE L'INSPECTION SANITAIRE

HEALTH DEPARTMENT
DIVISION OF SANITARY INSPECTION





Poison ivy before erasing



Poison ivy after spraying

**STATISTICS OF THE OPERATIONS
ADMINISTRATION
Table I**

A	EXAMINATION OF PLANS AND APPLICATION FOR PERMITS	1945	1946
(a)	new constructions.....	1,234	3,326
(b)	modified constructions.....	3,092	2,713
(c)	total number of permits issued.....	4,326	6,039
(d)	new dwellings.....	3,196	5,682
(e)	new plumbing.....	1,122	1,656
(f)	modified plumbing.....	1,531	1,897
(g)	total number of plumbing permits issued.....	2,653	3,753
(h)	plumbing plans examined.....	2,363	3,282
(i)	inspection certificates issued.....	1,325	1,083
(j)	plumbing stamps received.....	26,797	22,412
B	GRANTING OF LICENSE PERMITS		
(a)	master plumbers.....	449	484
(b)	journeymen plumbers.....	1,176	1,208
(c)	sheet metal and roofing contractors.....	121	95
(d)	barber shops, hairdressing parlors.....	1,388	1,427
(e)	laundries.....	284	287
(f)	upholstering establishments.....	151	159
(g)	public baths.....	11	12
(h)	master fumigators.....	4	4
(i)	fumigators.....	7	10
(j)	journeymen fumigators.....	2	38
(k)	funeral directors.....	79	78
(l)	embalmers.....	67	64
(m)	massage establishments.....	25	20
(n)	masseurs.....	97	92
(o)	dry cleaning establishments.....	—	7
C	NOTIFICATIONS AND PROSECUTIONS		
(a)	verbal notifications by inspectors.....	11,912	16,093
(b)	first notices.....	7,081	10,361
(c)	second notices.....	2,819	5,280
(d)	final notices.....	1,354	2,546
(e)	court notices.....	—	2,464
(f)	actions (Recorder's Court).....	232	236
(g)	actions maintained.....	220	197
(h)	suspended sentences.....	11	24
(i)	actions in abeyance.....	1	15

Table II

BOARD OF EXAMINERS	Number of sittings	Number of candidates	Certificates of competency granted	Candidates that failed
Plumbers.....	20	289	144	145
Fumigators.....	1	2	2	0
Funeral Directors.....	3	19	12	7
Embalmers.....		7	6	1

Table III

COMPLAINTS	1945	1946
(a) total number of complaints.....	11,919	12,467
(b) complaints founded.....	8,521	8,751
(c) complaints unfounded.....	3,398	3,716
(d) distribution of complaints:		
animals.....	363	634
inhabitated cellars.....	—	51
inhabitated dark rooms.....	—	29
defective constructions.....	553	283
refuse.....	1,587	1,763
frozen water.....	151	135
contaminated water.....	—	27
stagnant water.....	—	146
insufficient lighting.....	34	15
stables.....	—	76
smoke.....	224	232
gas smell.....	499	501
gasoline smell.....	162	91
inhabitable dwellings.....	484	119
dampness.....	—	146
uncleanliness.....	1,681	1,874
bad smells.....	885	1,149
miscellaneous.....	1,154	327
defective plumbing.....	3,006	3,089
dust.....	150	102
rats.....	—	285
vermin and insects.....	676	15
shaking of mops.....	223	460
overcrowding.....	—	57
roofs leaking.....	—	368
ventilation.....	—	280

The complaints concerning noise were referred to the Police Department; those concerning insufficient heating to the Wartime Rentals Commission.

Table IV

MISCELLANEOUS	1945	1946
Special reports	1,262	1,997
Wasting of water	791	1,182
Phone calls	45,630	50,235
Informations	7,186	6,122
Asphyxiation by gas	51	18
Deratization of buildings	60	116
Dead animals (big)	1,430	557
Dead animals (small)	29,986	31,382
Dead animals detritus (lbs)	79,004	86,219
Visits after asphyxiation	—	31
Reports following asphyxiation	—	14
Back water valves inspected	—	921
Back water valves defective	—	163

Table V
Supervision of inspectors' work

	1945	1946
Number of inspections	4,421	5,597

GROUP "A"
CONSTRUCTION AND PLUMBING

Table VI

A	INSPECTIONS AND FIXTURES	1945	1946
	Total number of inspections	26,651	32,588
	Total number of plumbing fixtures installed	16,491	26,646
	Total number of gas fixtures	3,131	3,353
	Number of back water valves	47	106
	Grease traps	30	25
B	PLUMBING TESTS		
	Air tests	2,609	3,370
	Water tests	2,039	3,234
	Smoke tests	71	48
	Total	4,719	6,652

GROUP "B"

SANITARY RECORDS OF DWELLINGS AND NUISANCES

Table VII

A	NUISANCES	1945	1946
1)	Visits following complaints	36,445	35,887
	Number of dwellings visited	19,056	29,691
	Number of cellars visited	6,257	9,169
	Number of sheds visited	3,202	3,859
	Number of yards visited	3,428	4,720
	Number of lanes visited	545	936
	Commercial establishments visited	2,071	2,361
	Other establishments	—	968
2)	Defects and nuisances:		
	Defective plumbing	3,189	5,610
	Defective construction	700	923
	Uncleanliness	2,697	4,102
	Stagnant water	509	678
	Bad smells	692	1,114
	Vermin	435	791
	Contraventions	1,035	1,465
B	SANITARY RECORDS		
1)	Total number of inspections	25,948	29,518
	Buildings visited	3,748	2,775
	Dwellings visited	14,527	6,519
	Cellars visited	4,228	2,987
	Sheds	8,998	2,272
	Yards	5,100	19,957
	Lanes	568	338
	Commercial establishments	—	1,116
2)	Defects, contraventions, etc.		
	Defective plumbing in	2,375 dwell.	1,196 dwell.
	Defective construction in	267 build.	44 build.
	Uncleanliness	630 dwell.	2,287 dwell.
	Stores occupied as dwellings	902	26
	Dark rooms founded	169	8
	Dark rooms corrected	105	7
	Cellars occupied as dwellings	67	3
	Inhabitable dwellings	192	42
	Contraventions	—	883

Table VIII

SANTARY RECORD

DEPARTMENT OF HEALTH • SANTARY INSPECTION

BUILDINGS MISCELLANEOUS

Churches	B	P	Industrial	B	P	Area in acres		Residential zone	Commercial zone	Industrial zone	REMARKS	No of rooms occ for comm.	Dwellings	Buildings	No. of rooms	No of families	Rooming Houses	No of roomers	No of rooms per person	Rollers inhabited	Darkrooms		Rooms insus lighted	W.C. not lighted and not vented	W.C. not lighted but vented	Defective plumbing	Satisfactory plumbing	Dirty	Dwellings without baths	Roofs drained to the outside	Unhealthy dwellings	Heating		Lighting		Other means
						Population	Mortality rate														Inhabited	Non inhabited														

GROUP "C"
SPECIAL BY-LAWS

Table IX

A	WATER SUPPLY—By-Law 1203
1)	<p>Establishments drawing water from a source other than the municipal aqueduct as secondary supply:</p> <p>a) establishments drawing water from the St. Lawrence River 27</p> <p> permits obtained 20</p> <p> without permit 7</p> <p> aqueduct not connected directly to the river water 11</p> <p> aqueduct protected by F. M. valves 15</p> <p> aqueduct not protected 1</p> <p>b) establishments drawing water from the Lachine canal 40</p> <p> permits obtained 32</p> <p> without permit 8</p> <p> aqueduct not connected directly to the canal water 17</p> <p> aqueduct protected by F.M. valves 23</p> <p>c) establishments drawing water in the Des Prairies River 2</p> <p> permits obtained 1</p> <p> without permit 1</p> <p> aqueduct protected by F.M. valves 1</p> <p> aqueduct not protected 1</p> <p>d) establishment drawing water in the aqueduct canal 1</p> <p> without permit 1</p> <p> aqueduct protected by F.M. valves 1</p> <p>e) establishments drawing water in a well 196</p> <p> permits obtained 39</p> <p> without permit 83</p> <p> wells not in use 74</p> <p> aqueduct not connected to the wells 113</p> <p> aqueduct protected by valves 10</p> <p> dwellings supplied by well water 10</p> <p>2) Pollution danger in the buildings supplied only by the municipal aqueduct:</p> <p>a) pollution dangers ascertained 2,044</p> <p>b) pollution dangers removed 219</p>

This By-Law is enforced jointly with the Public Works Department and required 576 inspections.

Table X

B SWIMMING POOLS AND BATHING—By-Law 1252				
a) number of inspections				868
b) water samples collected				490
c) research of residual chlorine				728
d) residual chlorine above .1 p.p.m.				710
x e) % of residual chlorine				97.5
f) total number of bathers				1,573,615
g) classification of pools	Group	Municipal Baths	Semi Public Baths	Total
Filters and automatic chlorination.	A	5	5	10
Filters and intermittent disinfection	B	12	6	18
Intermittent disinfection only	C	1	4	5
Beaches and wading pools	D	18	6	24
Total		36	21	57

x To assure a best quality of water in the swimming pools, the attendant of each pool have to register on a table supplied for that purpose, the amount of residual chlorine found in the water at different hours of the day. These reports are sent periodically to the Department of Health for control; this has largely contributed to the good results obtained in the application of this By-Law.

Table XI

Bacteriological results of water analysis in public baths in the City of Montréal—1946

BATH	Group	Attendance	Number of samples taken	% of samples with residual chlorine over 0.2 p.p.m.	% of samples with counts over 200/c.c.	Tubes positive in %		
						0.1 c.c.	1.0 c.c.	10 c.c.
Hogan.....	A	85,346	15	100	0	0	0	0
Laviolette.....	B	47,348	15	100	0	0	0	0
Quintal.....	B	43,540	15	100	0	0	0	0
New Community Hall.....	A	30,129	15	100	0	0	0	0
Mathieu.....	B	42,951	14	100	0	0	0	0
M. A. A. A.....	B	10,950	14	100	0	0	0	0
Y. M. C. A. Central.....	B	139,156	13	100	0	0	0	0
Rubenstein.....	B	51,014	13	100	0	0	0	0
Hushion.....	B	32,924	13	100	0	0	0	0
Y. M. C. A.....	B	17,682	13	100	0	0	0	0
St-Michel.....	A	33,330	12	100	0	0	0	0
Hochelaga.....	C	28,225	11	100	0	0	0	0
O'Connell.....	B	36,851	9	100	0	0	0	0
Lap. Létourneau.....	B	99,615	15	100	5.10	0	0	0
Schubert.....	A	92,277	17	100	5.15	0	0	0
St-Louis.....	B	62,961	17	94.2	5.15	0	0	0
Maisonneuve.....	B	109,296	15	100	6.10	0	0	0
Lévesque.....	B	82,640	15	100	6.10	0	0	0
St-Denis.....	B	53,457	15	100	6.10	0	0	0
Généreux.....	A	81,992	14	100	7.2	0	0	0
Protestant High School.....	A	8,259	11	100	9.1	0	0	0
Y. M. H. A.....	A	147,522	17	70.10	11.13	0	0	0
Y. M. C. A. North.....	B	44,084	15	93.3	13.5	0	0	0
Émard.....	B	76,237	14	85.10	14.4	0	0	0
C. E. O. C.....	C	2,350	6	100	16.6	0	0	0
R. C. O. C.....	A	12,560	3	33.1	66.2	0	0	0
Audet.....	C	365	3	33.1	66.2	0	0	0
Knights of Columbus.....	B	11,500	7	77.3	28.4	0	0	0
Ass. Ath. Nationale de la J.....	A	60,200	23	3.10	56.12	0	0	5.15
Y. M. C. A.—N.D.G.....	A	22,790	16	75	12.8	0	3.4	24.40
Colonial T. Bath (women).....	C	1,680	14	85.10	21.6	7.6	7.4	7.40
Colonial T. Bath (men).....	C	9,600	14	85.10	7.6	9.22	14.8	7.10
Rabinal College (private).....	C	780	14	42.12	42.12	2.16	17.24	14.20
								35.50

Table XII

Bacteriological results of water analysis in splashing pools, in the City of Montréal—1946

POOLS	Attendance	Number of samples taken	% of samples with residual chlorine over 0.2 p.p.m.	% of samples with counts over 200/c.c.	Tubes positive in %		
					0.1 c.c.	1.0 c.c.	10 c.c.
St-Eusèbe Pool.....	24,000	5	100	0	0	0	0
Campbell Park (De Maricourt).....	25,000	2	100	0	0	0	0
Cousineau (private).....	600	2	100	0	0	0	0
Laurier Clinic.....	20,000	1	100	0	0	0	0
Laurier Park (Boys).....	25,000	3	66.6	0	0	0	0
Jeanne-Mance Park.....	25,000	3	100	33.3	0	0	0
Campbell Park (Chatham).....	10,000	3	100	33.3	0	0	0
Ste-Cunégonde Park.....	25,000	4	75	25.0	0	0	0
Campbell (Rosemont).....	10,000	3	66.6	33.3	0	0	0
Laurier Park (Girls).....	25,000	3	66.6	33.3	0	0	0
Hibernia Square.....	10,000	1	0	100	0	0	0
Maisonnette Park.....	6,000	1	0	0	0	0	0
Préfontaine Park.....	25,000	3	100	0	11	0	0
Dufferin Park.....	25,000	4	100	25.0	0	25.0	25.0
Jarry Park.....	25,000	5	20.0	80.0	0	66.0	76.0
Maisonnette Market.....	25,000	5	80.0	20.0	6.66	20.0	20
Christ-Roi.....	25,000	6	66.6	33.3	16.66	33.3	30.0
Rouen Park.....	25,000	3	66.3	33.3	22.2	33.3	33.3
Campbell Park (Notre-Dame East).....	15,000	1	0	100	100	100	100

Table XIII

Repartition du nombre de baigneurs par mois dans les bains publics et semi-publics de Montréal
Number of Bathers per month in Montreal Public and Semi-public Baths

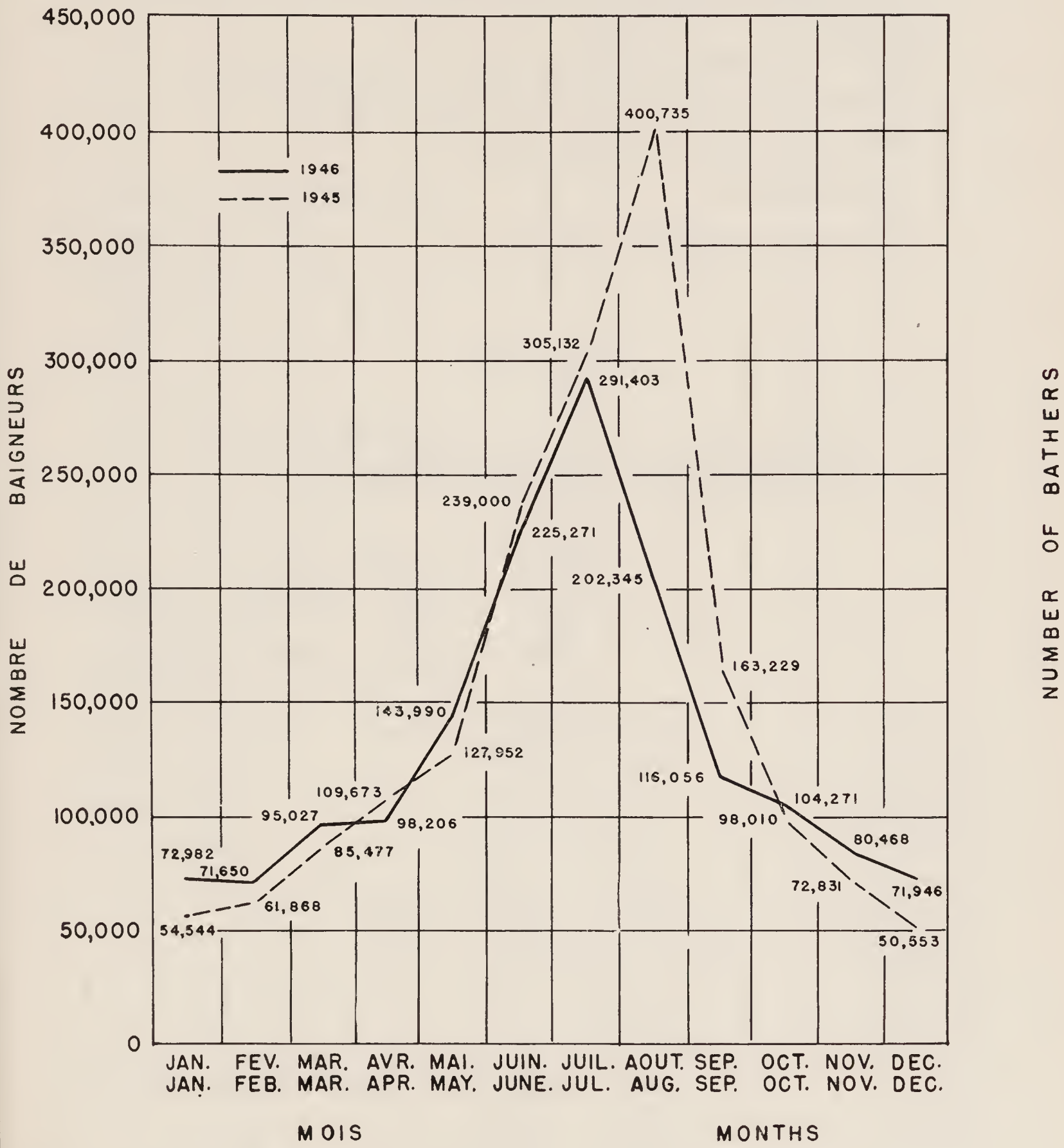


Table XIV

C	FUMIGATION—By-Law 1275	
a)	total number of fumigations	7
b)	number of fumigated dwellings	59
c)	number of commercial, industrial, etc., estab. fumigated	5
d)	infiltration of fumigant in dangerous zone	4
e)	dwellings affected	7
f)	total number of inspections	130

Table XV

D	DESTRUCTION OF NOXIOUS WEEDS—By-Law 1622 CLASSIFICATION BY NUMBER OF LOTS				
Wards	Lots visited	Number of lots visited infested	Number of lots sprayed with chemicals	Notifi- cations to interested owners	Parks sprayed with chemicals
Ahuntsic	12,447	5,826	1,554	1,440	2
Delorimier	450	207	..	41	..
Hochelaga	14	5	..	2	..
Maisonneuve	68	31	..	33	..
Mercier	39	18	..	3	..
Montcalm	250	115	..	15	1
Mont-Royal	2,466	1,161	104	110	1
N.-D.-de-Grâce	10,379	4,849	1,542	317	2
Papineau	2	1	..	1	2
Rosemont	75	35	..	25	..
St-André	16	7	..	2	..
St-Eusèbe	6	3	..	1	..
St-Jean	5,169	2,428	583	813	..
St-Paul	28	13	..	5	..
Villeray	1,464	670	..	50	..
Total	32,873	15,369	3,783	2,858	8

Table XVI

E	MISCELLANEOUS	Inspections	Defects and Contraventions	Nuisances and Uncleanliness
	Barber shops, hairdressing parlors etc., (By-Law 1006)..... Laundries (By-Law 1009)..... Establishments; mattresses and upholstered articles (By-Law 1089)..... Massage establishments (By- Law 1573)..... Funeral director establishments (By-Law 1631)..... Educational establishments..... Industrial establishments..... Theatres, movies, public halls.... Refuges, institutions, hospitals... xNursing homes..... Public buildings..... Commercial establishments..... Other establishments..... Dwellings visited..... Cellars visited..... Sheds visited..... Yards visited..... Lanes visited.....	6,314 390 824 269 270 129 3,642 240 295 21 443 2,510 705 10,880 3,914 1,590 2,271 676		
	Total.....	25,895	3,943	5,159

x The supervision of this work is under the jurisdiction of the Division of Child Hygiene, with which we co-operate.

SUMMARY 1946

Administration :	1945	1946
Supervision of the inspector's work	4,421	5,597
Complaints	11,919	12,467
Piping tests	4,719	6,652
Special reports	1,262	1,997
Phone calls	45,630	50,235
Informations	7,186	6,122
Number of inspections :		
A—Construction and plumbing	26,651	32,588
B—Nuisances	36,445	35,887
Sanitary records of dwellings	25,948	29,518
C—Special By-Laws	43,380	25,895
	_____	_____
D—Total number of inspections	132,424	167,240

Division of laboratories

**Report of the
DIVISION OF LABORATORIES
for the year 1946**

by

Doctor R. BÉRARD

Superintendent

The total number of bacteriological and chemical analyses made during the year was 81,757 divided among the different Divisions of the Department of Health, the Police Department and the private practitioners of the City of Montréal.

The summary of analyses performed in the Division of Laboratories is indicated in the following tables:

Table I

Summary of the analyses performed for the year 1946

Milk, cream and by-products	27,275
Solid food, meat, canned foods, etc.	1,652
Water: (a) Aqueduct	742
(b) Public swimming pools	1,419
(c) Dishes washing in the dining-rooms and apparatus and recipients in the dairies	2,138
Sputum, re: tubercle bacilli	7,648
Collecting blood: for Wassermann test	3,401
Blood, stools and urines, re: B. typhosum and B. paratyphosum A and B and B. dysenteriae	4,958
Blood, re: chemical analysis and cytology	3,971
Throat swabs, re: diphtheria, Vincent's angina, etc.	6,149
Urethral and vaginal swabs	5,024
Urine, re: chemical analysis	14,286
Miscellaneous analyses	3,094
	<hr/>
	81,757

Table II

A. Specimens analyzed for the Department of Health
Division of Food Inspection:

I—Solid Foods

1. Natural:	
Bacteriological examination	467
Chemical examination	106
Physical examination	455
2. Canned:	
Bacteriological examination	151
Chemical examination	18
Physical examination	153
3. Prepared:	
Chopped meat, re: adulterations	19
Sausage, re: adulterations	282

II—Liquid Foods

Milk and cream:

1. Natural:	
(a) Samples brought by our inspectors:	
1—Bacteriological examination:	
Plate count	7,616
B. coli-test	7,616
2—Chemical analyses:	
Complete (1)	47
Summary (2)	4,620
Preservative test	4,448
(b) Samples brought by citizens:	
Summary chemical analysis plus preservative test.	28

(1) Complete chemical analysis comprises specific gravity, butter fat, dry extract, defatted extract, water.

(2) Summary chemical analysis comprises specific gravity by "QUEVENNE" lacto-densimeter, butter fat by Babcock test, preservative test.

2. By-products:

Chocolate drink (bacteriological examination)	346
Chocolate drink (chemical analysis)	166
Ice cream (bacteriological examination)	686

III—Miscellaneous

Control in nurseries, hospitals (milk, water) (bacteriological examination)	1,702
Mastitis, re: streptococcus	840
Phosphatase	1,149
Sugar (chemical examination)	1
Thermometer (checking)	24
Wash test in dairies for apparatus and recipients (bacteriological examination)	1,080
Wash water in dining-room (bacteriological examination)	1,058
Water from the Montréal Aqueduct (bacteriological examination)	742
Water from various sources (bacteriological examination)	184

IV—Biological examination (1)

Blood agglutination test re: B. typhosum and B. paratyphosum A and B	829
Stools, re: B. typhosum and B. paratyphosum A and B	1,498
Urine, re: B. typhosum and B. paratyphosum A and B	1,498
	<hr/> 37,829

(1) These tests are carried out for the detection of typhoid "germ carriers" among the employees of dairies and other food handlers.

Division of Sanitation:

Thermometer (checking)	1
Water from public swimming pools (bacteriological examination)	946
Water from public swimming pools (chemical examination)	473
Water from various sources (bacteriological examination)	285
Water (chemical examination)	19
	<hr/> 1,724

Division of Contagious Diseases:

Blood: agglutination test, re:	
B. typhosum and B. paratyphosum A and B.	3
Stools, re: B. typhosum and B. paratyphosum A and B.	52
re: B. dysenteriae	52
Throat swabs, re: diphtheria	5,967
Urine, re: B. typhosum and B. paratyphosum A and B.	52

Health Card Section:

Collecting blood for Wassermann test	3,224
Urethral and vaginal swabs	2,676

Tuberculosis Section:

Sputum, re: tubercle bacilli	4,682
re: tubercle bacilli culture	100
Gastric lavage, re: tubercle bacilli culture	228
	<hr/> 17,036

Division of Child Hygiene:

Salicylic acid	1
Thermometer (checking)	3
Urine: chemical and microscopical examination	3,572
	<hr/>
	3,576

Medical Legal Service: (Medical Control)

Blood, re: determination of sugar	358
" of urea	354
differential blood count	369
red and white cells count	369
Urine: chemical and microscopical examination	1,481
	<hr/>
	2,931

B. Specimens analyzed for the Police Department:

Narcotic drugs	32
Urethral and vaginal swabs (prostitutes)	1,071
Urethral and vaginal swabs, re: culture for gonococcus	1,076
	<hr/>
	2,179

C. Specimens analyzed for physicians:

Blood agglutination test	{	re: B. Aertrycke	3
		re: Brucella abortus	124
		re: B. dysenteriae Flexner	3
		re: B. dysenteriae Shiga	3
		re: B. dysenteriae Sonne	3
		re: B. enteritidis Gaertner	3
		re: B. paratyphosum A	124
		re: B. paratyphosum B	124
		re: B. paratyphosum C	3
		re: B. Proteus X19	3
		re: B. typhosum	124
		re: Salmonella group	3
		re: Salmonella Newport	3
		Blood, re: culture	62

Blood, re: determination of cholesterol	7
of creatinine	5
of hemoglobin	236
of sugar	1,107
of urea	684
of uric acid	10
differential blood count	236
red and white cells count	236
Collecting blood	177
Cerebro-spinal fluid	1
Pleural fluid	5
Sputum, re: tubercle bacilli	2,638
Stools: bacteriological examination (blood, protozoa, tubercle bacilli, worms, etc.)	136
re: B. dysenteriae	177
re: B. typhosum and B. paratyphosum A and B	220
re: entamoeba histolytica	115
Throat swabs, re: diphtheria	91
re: Vincent's angina	91
Urethral and vaginal swabs	201
Urine: bacteriological examination (B. coli, gonococcus, tubercle bacilli)	203
chemical and microscopical examination	9,233
re: B. typhosum and paratyphosum A and B	57
Worms, re: identification	9
Wound pus	22
	<hr/>
	16,482
	<hr/>
Total	81,757
	<hr/>

Contagious diseases—1946

Diseases	Number of specimens	Positive	Negative	Suspected	Unsatis- factory	Percentage			
						Positive	Negative	Suspected	Unsatis- factory
Diphtheria.....	6,055	319	5,736	0	0	5.26	94.74	0.00	0.00
Rabies.....	2	0	2	0	0	0.00	100.00	0.00	0.00
Tuberculosis.....	7,426	739	6,687	0	0	9.95	90.05	0.00	0.00
Typhoid fever: Physicians of the City.....	560	41	519	0	0	7.32	92.68	0.00	0.00
Detection of "germ carriers" (food handlers).....	3,838	(a) 38	3,800	0	0	0.99	99.01	0.00	0.00
Gonorrhea: Physicians of the City.....	201	54	147	0	0	26.86	73.14	0.00	0.00
Food handlers.....	2,676	80	2,596	0	0	2.98	97.02	0.00	0.00
Prostitutes(*).....	1,071	108	963	0	0	10.08	89.92	0.00	0.00
Amoebic dysentery.....	115	0	115	0	0	0.00	100.00	0.00	0.00

(*) Women arrested in disorderly houses.
(a) These positive results proceed from vaccinated personal.

**Bacteriological analysis of milk, cream, ice cream, water,
etc.**

A. Quantitative analysis (Standard Plate Count):

Division of Food Inspection:

Pasteurized milk (delivered to consumers).....	3,584
Special milk (delivered to consumers).....	689
Chocolate drink.....	173
Cream.....	367
Ice cream.....	343
Controls in pasteurizing plants and special milk establishments.....	2,976
Controls in nurseries, hospitals.....	851
Tests on washing of utensils (dairies).....	540
Water from various sources: eggs, oysters, etc.....	92
Water from the Montréal Aqueduct.....	371
Wash water (dining-room).....	529
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	10,515

Division of Sanitation:

Water from public swimming pools.....	473
Water from various sources.....	144
	<hr/>
	617

**B. Qualitative analysis (fermentation test for detection
of bacteria of the B. Coli group in the above samples):** 11,132

C. Phosphatase.....	1,151
Mastitis.....	785
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Total.....	24,200
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**Bacteriological analysis of water from the Montréal Aqueduct
year 1946**

Month	Number of samples	Number of colonies	B. Coli 10 c.c. portions
January	36	1,037	0/180
February	30	1,234	0/150
March	26	848	0/130
April	35	6,211	0/175
May	34	8,222	0/170
June	32	7,226	19/160
July	31	1,548	2/155
August	33	3,460	4/165
September	34	2,165	30/170
October	29	16,318	0/145
November	27	359	0/135
December	17	676	0/85
Total	364	49,304	55/1820
Mean	30	135	3.02%

Bacteriological analyses, 1946

Pasteurized milk—Plate count

Number of samples	Numeration					Percentage				
	Less than 10,000 colonies per c.c.	From 10,000 to 50,000 colonies per c.c.	From 50,000 to 100,000 colonies per c.c.	More than 100,000 colonies per c.c.	Samples void	Less than 10,000 colonies per c.c.	From 10,000 to 50,000 colonies per c.c.	From 50,000 to 100,000 colonies per c.c.	More than 100,000 colonies per c.c.	Samples void
From January to May inclusive:— 1,508	579	732	113	84	0	38.3	48.6	7.6	5.5	0.0
From June to September inclusive:— 1,184	539	484	93	68	0	45.5	40.8	7.9	5.8	0.0
From October to December inclusive:— 892	394	392	46	60	0	44.2	43.9	5.2	6.7	0.0
For the year:— 3,584	1,512	1,608	252	212	0	42.2	44.8	7.1	5.9	0.0

Bacteriological analyses, 1946—(continued)

Special milk—Plate count

Number of samples	Numeration			Percentage		
	Less than 25,000 colonies per c.c.	More than 25,000 colonies per c.c.	Samples void	Less than 25,000 colonies per c.c.	More than 25,000 colonies per c.c.	Samples void
From January to May inclusive:— 374	317	57	0	84.7	15.3	0.0
From June to September inclusive:— 190	183(a)	7(b)	0	96.3	3.7	0.0
From October to December inclusive:— 125	116	9	0	92.8	7.2	0.0
For the year:— 689	616	73	0	89.4	10.6	0.0

(a) Less than 50,000. (b) More than 50,000.

Bacteriological analyses, 1946—(continued)

Special milk—B. Coli group

Number of samples	Fermentation test					Percentage				
	B. Coli Group				Samples void	B. Coli Group				Samples void
	Present			Absent		Present			Absent	
	0.01 c.c.	0.1 c.c.	1 c.c.			0.01 c.c.	0.1 c.c.	1 c.c.		
From January to May inclusive:— 374	21	38	75	240	0	5.6	10.2	20.1	64.1	0.0
From June to September inclusive:— 190	38	44	51	57	0	20.0	23.1	26.9	30.0	0.0
From October to December inclusive:— 125	6	13	41	65	0	4.8	10.4	32.8	52.0	0.0
For the year:— 689	65	95	167	362	0	9.4	13.8	24.2	52.6	0.0

Bacteriological analyses, 1946—(continued)

Raw milk

Year	Number of samples	Numeration				Percentage			
		Less than 100,000	From 100,000 to 500,000	From 500,000 to 1,000,000	More than 1,000,000	Less than 100,000	From 100,000 to 500,000	From 500,000 to 1,000,000	More than 1,000,000
1946	200	20	68	32	80	10.0	34.0	16.0	40.0

Year	Number of samples	B. Coli Group			Percentage						
		Present			Absent						
		0.0001 c.c.	0.001 c.c.	0.01 c.c.	0.0001 c.c.	0.001 c.c.	0.01 c.c.				
1946	200	136	32	18	0.01 c.c. <td>14</td> <td>68.0</td> <td>16.0</td> <td>9.0</td> <td>0.01 c.c.</td> <td>7.0</td>	14	68.0	16.0	9.0	0.01 c.c.	7.0

Division of Medical Control

Report of the
DIVISION OF MEDICAL CONTROL
for the year 1946

by

Doctor LOUIS ROUX
Superintendent

The report of the Division of Medical Control is divided into two parts, as follows:

I—MEDICAL EXAMINATIONS
II—MEDICO-LEGAL OFFICE

I—MEDICAL EXAMINATIONS

The first part includes medical examination of and visits made to employees who are absent through illness; in 1946, there has been 5,605 reports made for same and 142 "special reports" concerning physical condition: 5,747 all together.

The social Welfare department having no attendant physician, our doctors are called upon for examining the refugees of Meurling Refuge as they enter at night, and vaccinating them when necessary. Moreover, every Friday, the children leaving for an orphanage or returning, also receive a thorough physical test. The sick or invalid requesting admission to sanatoriums or refuges are visited by our doctors.

We have taken care of many urgent cases which took place in our premises.

II—MEDICO-LEGAL OFFICE

Following is the report of the medico-legal adviser for the year 1946:

1. Workmen injured:

Examinations at the Medico-Legal office	1,768
Examinations at home and at the hospitals	25
First reports	685
Subsequent reports	385

2. Expert reports for the Legal Department:

Examinations at the Medico-Legal office	39
Examinations at home and at the hospitals	393
First reports	316
Subsequent reports	126

3. Examinations on account of pension fund

(Employees and constables):

Examinations re: admission	356
Examinations re: superannuations and departures	34
Examinations re: future employees	582

4. Examinations made for the Fire Department:

Examinations re: new cadets	452
Examinations re: superannuations and departures	12
Examinations re: revision of cadets	24

5. Periodical examinations of City employees 761

There are in addition, visits to hospitals to consult records, examine radiographies, etc., and appearance before the courts of justice and the examinations at the Accident Compensation Board's office, which we have not taken into account.

Division of vital statistics

Report of the
DIVISION OF VITAL STATISTICS
for the year 1946

by

Dr. ANT. B. VALOIS, M.P.H.,
Demographer and Superintendent

COMMENTS OF THE DEMOGRAPHER

Due to the length of the study entitled "Social Area at the Service of Public Health" the comments of the demographer shall only be concerned this year with the estimate of the population.

The figures of the "de facto" population are estimated by the Assessor of the City as 1,096,060 in the year 1946.

This figure includes not only the resident population who dwell in the City for over a year but also the floating population of Montréal.

According to his theories outlined in a study dealing with the estimation of an urban population, the demographer of the Department of Health has estimated the population "de jure" at 1,007,000 inhabitants.

The floating population resulting from the difference between these two figures is 89,060.

The computation of the estimate of the population "de jure" is based upon data originating from four different sources. After adjusting these data as of the first of July 1946, the demographer determines the resident population of Montréal by calculating the arithmetic mean of these four estimates.

Social areas at the service of public health(1)

The establishment of Social Areas is one of the most outstanding contributions of the Statistical Division of a progressive Department of Health. These Social Areas (better known as Census Tracts to our American friends) are in line with recent trends of Public Health in Canada towards neighborhood health.

If well laid out, they can:

- 1° Bring preventive health knowledge and services within reach of the homes the most in need;
- 2° Lead to more accurate planning of community health;
- 3° Assist in organizing and administrating neighborhood health centers;
- 4° Further research in local health problems;
- 5° Contribute to the teaching and training of medical students and public health personnel; and finally,
- 6° Provide through survey and analysis, statistical services to other medical groups and allied fields such as social welfare and private agencies.

To an ever-increasing degree, Public Health, along with modern medical science, is gradually changing from a qualitative to a quantitative point of view in its methods of thought and action.

Gone are the days when public health officials would set up programs based upon rule-of-thumb practices or arbitrary policies originating from single impressions of the overall picture of a community.

Today, the Health Officer realizes that a community cannot be compared, for instance, to an apple that is uniform throughout, but rather to a bunch of grapes, with clusters differing among themselves, some large, others small, some sweet, others sour, some excellent, others bad throughout.

More and more, he recognizes that a community is not only a mere aggregate of people but is composed of numerous small neighborhoods of relatively homogenous populations; that each of

(1) Presented before the Sections of Epidemiology and Vital Statistics at the thirty-fourth annual meeting of the Canadian Public Health Association, held in the Royal York Hotel, Toronto, May 6-8, 1946, in conjunction with the annual meetings of the Ontario Health Officers Association and the Canadian Institute of Sanitary Inspectors (Ontario Branch).

these units presents social and public health problems, different in nature and in scope: problems that can be dealt with effectively only in their local environment.

The principle underlying this concept is based upon the fact-findings of social sciences. In a series of social research studies, undertaken by the department of sociology at the University of Chicago, the whole field of social forces prevailing in community life were surveyed, described, analyzed and finally measured.

It was demonstrated and corroborated by the facts brought to light by this research that each segment of a community comes into being at the hands of man and that, in turn, it shapes the lives of the people who inhabit it.(1)

It was established that a human community, like a biological organism, grows by the process of subdivision. As a city develops, its structure becomes more complex and its areas more specialized.

It was also shown that the main factors which modify the development of a community are the tendency to outward expansion from their center and the natural or artificial variations of the topographical features, such as lakes, rivers, hills, railways, cemeteries and parks . . .

These studies(2) also illustrated that the city grows outward, at first, from its "Central Business District" in a series of expanding zones; secondly, that it develops into a zone, called "Zone in Transition" where are to be found slum areas due to deterioration of residences, created by the invasion of business and light manufacture; thirdly, that it expands into a "Zone of Workingmen's homes" sprinkled with commercial establishments; fourthly, that it extends into a "Zone of Better Residences" with middle-class homes at its inner belt and first grade residences and apartments for its outer ring; finally, that the city is encircled by a fifth zone called "the Commuter's Zone" where suburban cities and municipalities form the metropolitan region of the community.

Within these zones of urban growth are to be found local districts, which in turn, subdivide into smaller areas called neighborhoods. It is this concept of neighborhood life, which applies the most accurately to the expression "Social Area" used in this study.

The importance of these findings in relation to Public Health may be determined when we realize how the health of the people, living in these zones, is affected by their environment.

In Zone I, the "Central Business District" there is a large population by day but very few people by night, owing to the absence of residences. Mortality and morbidity caused by traffic accidents are frequently high in these districts. Usual public health services, related to maternal and child hygiene which have to be dealt with on a local basis, do not exist here due to the fact there are very few children. Other public health services that apply to water, milk, food, sanitation and industrial hygiene should be controlled from the Central Department of Health. Eventually, most of these districts will be taken over by heavy industry.

In the "Zone in Transition" will be found most of the more serious health problems that affect adults. Here are the worse slum areas, the cheap rooming-houses, the resorts of gambling, bootlegging, sexual vice and the breeding place of crime. In these neighborhoods live homeless men, members of disorganized families, first settlement immigrant colonies and so-called undesirable characters.(2)

It was observed that foreign races, with few exceptions, take up residence in these zones at points of high mobility and low resistance. In these districts, the different colonies of immigrants are grouped according to race and culture into neighborhoods usually called: Chinatown, Hobohaemia, Little Sicily, Little Poland, the Ghetto, the Black Belt and the Underworld.

In these areas are concentrated: cases of poverty, bad housing, physical and mental diseases. Here the mortality and morbidity rates are the highest. Heart diseases, cancer, nephritis, venereal diseases, tuberculosis and accidents are among the leading causes of death.

Because of different food and personal hygiene habits, because of a wide range of standards as to maternal and infant care, the Health Officer is faced with numerous public health problems among these colonies. Besides the difficulty of language, numerous customs and traditions prevent these people from using adequately the available facilities offered to them by the Department of Health.(3)

The next zone is largely constituted by neighborhoods of the native-born workmen and the second settlement immigrants, who push their way out along business and transportation thoroughfares to the outskirts of the community. In these areas, the following public health services are badly needed: infant and maternal hygiene, preschool and school hygiene, communicable disease control . . . In spots, morbidity and mortality rates are very high. For here, most of the larger families are crowded in two-flat dwellings. They live on small incomes which provide the bare necessities of life. Most of the children of these families plan upon marriage to set up homes in Zone IV.

The "Zone of Better Residences", that follows, extends up to the city limits. Due to a better economic status, better housing conditions and better education of the residents of these neighborhoods, the lowest morbidity and mortality rates are found in these areas.

The last zone "The Commuter's Zone" is composed of a number of small cities, towns and municipalities which encircle the urban area. Because of the conflict between the remaining agricultural interests and the successful invasion of the area by city-dwellers, because of the rapidly changing trends of these populations and because of the lack of medical facilities, public health problems vary in nature and intensity for each neighborhood.

In practice, the concept of social areas applies remarkably well to large departments of health . . . of which it has been said by Dr. Charles Wilinsky, deputy-commissioner of Health of the city of Boston(4) "the fault of public health administration was due to the fact that it was too far removed from the people it attempted to serve".

Now that the aim of Social Areas and the principle underlying their establishment are clearly outlined, we may try to define them as small permanent tracts of land into which a community may be subdivided for the purpose of recording local data. This can be done by a permanent local committee in co-operation with the Dominion Bureau of Statistics.

Historically, this idea was first conceived in 1902 by Doctor Walter Laidlaw of New York City.(5) Dr. Laidlaw was then directing social studies for the Federation of Churches. Bewildered by the changes in the composition of population and in the complexity of the social and health problems in many neighborhoods, he vainly attempted to use the available statistics by boroughs and wards. Such statistics were demonstrated to be of little practical use because of the diversity of socio-economic conditions and population characteristics found within these areas.

In 1910, he persuaded the Bureau of the Census to use small permanent areas for census purposes in the City of New York and, for comparison, in seven other large cities. At that time, he called these areas "Sanitary Districts".

Today, the census tract system has spread to 61 cities and 24 metropolitan regions in the United States.(6) In Canada, the City of Vancouver, including part of the metropolitan area, and the City of Winnipeg were the first to adopt this system. Quebec City and metropolitan Montréal hope to establish similar areas before the 1951 Census.

Since 1945, both cities have been preparing the ground work essential to the planning of this project. In both cities, a committee, deeply interested in the practical uses of this plan, has been organized.

In Montréal, the Department of Health with the co-operation of the Dominion Bureau of Statistics, has grouped together over twenty-five members, representatives of different organizations actively engaged in collecting local community data.

A smaller committee composed of experts in their field, was formed with the following goals in view:

1. Preparation of a map of the city and the surrounding metropolitan area on as large a scale as possible, showing the name of each street, the number of each block, the location of parks, cemeteries, railroad property, business section, stores, industrial section . . .

2. Subdivision of the city into small geographical areas as uniform as possible in their main characteristics with regard to the population and the local environment.

3. Compilation of an index of streets which shows in what social area each number of each street is located. This street-index will be used by the vital statistician for allocating by social areas births, deaths, cases of contagious diseases . . .

In Canada, most of our cities are subdivided into wards. The advantages of Social Areas over wards arise from the facts: 1) that the ward is too a large a statistical unit to permit detailed local analysis; 2) that its boundaries are subject to change from political interference; 3) that it is unstable.(7)

While a census tract or a social area is sufficiently small to reveal distinctive features of local life, it has geographical boundaries in the form of natural barriers, that remain permanent from census to census, and its population has marked demographic economic and social homogeneity.

In Montréal, besides the ward, the oldest subdivision of the city and its metropolitan area is the parish. Most of the objections that apply to the ward as a statistical unit apply also to the parish. It is true that parishes cover smaller areas but many of them are too large and too heterogeneous for the purpose under study. It is also true that in the eastside of the city the parishes, where over 80 to 95% of the population is French-Canadian, really represent typical neighborhoods similar to the social areas. In that part of the city, the boundaries of the social areas may be made to fall within the limits of the parishes as at present constituted.

Usually the size of the population of these tracts may vary between 3,000 and 6,000.(8)

As a rule, no social area should be so small that cross-classifications cannot be shown for numbers that are too small nor rates calculated for unduly small aggregates of population.(9)

Some local agencies may insist that Social Areas be small, both in size and population, for detailed sociological analyses and random sampling purposes. In order to reach uniform agreement, it is my belief that Social Areas can be established on that basis as long as the main characteristics of the population and the environ-

ment are safeguarded. Other organizations, such as the Department of Health, may combine for its own purposes several census tracts similar to the Health areas of the City of New York. Depending on the scope of the problems under investigation, the vital statistician may analyse individually each social area or groups of Social Areas called Health Areas.

With these basic data available, the Statistical Section of the Division of Vital Statistics may proceed to embody the social areas with the other statistical records at the service of Public Health.

In order to direct this development, the up-to-date vital statistician needs a broad concept of vital statistics. In their relation to health, births and deaths are not ends in themselves but only elements in the broader field of population. Their occurrence are without significance unless connected with social and economic factors. It does require careful study to trace the roots of health problems and social illnesses to the basic issues of employment and wages, education, housing, living environment and other allied factors. The Health officer needs better knowledge of the people he serves, of their distribution and characteristics, as well as knowledge of the incidence of births and causes of deaths. Thus vital statistics become synonymous of demography. Only such a broad definition of vital statistics can lead to a well laid out plan of social areas and accurate planning of community health.(10)

If the statistical section is responsible for the statistical processing of all the records of the Department of Health, all reports may be coded by census tracts for purposes of comparison between small areas. Tract coding can be entered in most reports, such as nurses' visits and clinic records, when they are filled out in the field, to save time and expense. Besides the data supplied by the Dominion Census Branch, the vital statistician may code by social areas: (1) Births, deaths, stillbirths; (2) Diseases, including tuberculosis and venereal diseases; (3) Medical school and clinic reports; (4) Nurses school and clinic reports; (5) Sanitary inspectors reports.(10) Statistical summaries, timely reports and special studies can be conducted during the year, independent from the detailed tables in the annual report containing cross-classifications of socio-economic characteristics of the population.

Besides numerous statistical services supplied to medical universities, social welfare and other agencies in allied fields, the Department of Health, through survey and analysis, can provide fact-finding data on social medicine(11) to be used for in-service training of public health personnel and demonstration purposes on a social area basis.

As personnel and mechanical equipment become available and the statistical processes of the records of the different divisions of the Department of Health are integrated, other uses will be made known that will increase the efficiency of the Social Areas as geographical units for recording local data.

Nothing could demonstrate better the value of these social areas than the concrete results attained in American communities through the use of Census Tracts.

Summary

The principle underlying the establishment of social areas is founded on a sound scientific basis, that of human ecology.

At the service of public health, these Social Areas cannot only help bring preventive health knowledge and services within reach of the homes the most in need, but assist in solving their health problems in their own local environment.

If used by other agencies concerned with a community's health, Social Areas can also be a most flexible tool for integrating health and welfare planning with up-to-date community planning. (12) Thus combined efforts on a local uniform basis would lead to control of other social factors, such as slums, . . . that still challenge public health progress.

In the light of American experience with Census Tracts, the use of Social Areas by a progressive department of health should be a step forward and rank high among recommended measures, dealing with preventive medicine and the conservation of health in this postwar area.

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Vital statistics tables—1946

POPULATION

	Page
Table I—Population of Montréal by sex, race and percentage corresponding to each race	253
“ II—Excess of live births over deaths and rate of natural increase per 1,000 population by race	253

MARRIAGES

Table III—Number of marriages and rates per 1,000 population classified according to race	254
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BIRTHS

Table IV—Number of live births and rates per 1,000 population by sex and race	254
“ V—Number of births classified according to month, monthly mean by period of 5 years 1941 to 1945, annual mean and rate by 1,000 population 1941 to 1946	255
“ VI—Number of legitimate live births classified according to French-Canadian parishes, sex and race	256
“ VII—Number of illegitimate live births classified according to French-Canadian parishes, sex and race	260

DEATHS

	Page
Table VIII—Number of deaths classified according to month, annual mean, for each year and by period of five years, and annual rates per 1,000 population, 1941-1946.....	264
“ IX—Deaths classified according to age group, month, season and year, 1941-1946.....	265
“ X—Number of deaths by age and age group, classified according to sex, legitimacy, racial origin and percentage of the total corresponding to each group.....	266
“ XI—Number of deaths by age group and by month, classified according to racial origin.....	268
“ XII—Number of births (excluding stillbirths) and deaths of infants under one year, legitimate and illegitimate and death rates per 1,000 live births for each year and by period of five years, 1915-1946.....	269
“ XIII—Number of deaths among embryos and fetuses (under six months and a half of gestation), classified according to cause, sex and duration of pregnancy.....	270
“ XIV—Number of stillbirths legitimate and illegitimate, classified according to cause of death, sex and duration of pregnancy.....	271
“ XV—Number of deaths of infants under one year classified according to cause, age and month.....	272
“ XVI—Number of deaths among illegitimate infants, classified according to cause, age and place of death.....	274

DEATHS—Continued

	Page
Table XVII—Number of deaths (excluding stillbirths) and rates per 1,000 population classified according to race and sex	276
“ XVIII—Number of live births and deaths (excluding stillbirths) of infants under one year and rates per 1,000 live births classified according to race	276
“ XIX—Absolute mortality.—Number of live births for the year 1945 and the number of infants of this group having died before reaching one year in 1945 and 1946, and number and percentage of the survivors at the beginning of 1947, classified for each month	277
“ XX—Number of births and deaths of infants under one year and rate per 1,000 live births classified according to ward in 1946	278
“ XXI—Number of deaths classified according to civil status, sex and race	279
“ XXII—Number of deaths, classified according to cause, age group, sex and race	280
“ XXIII—Number of non-resident deaths, dying in Montréal, distributed by cause, age group, sex and race	282
“ XXIV—Deaths by ward and by cause	284
“ XXV—Number of deaths classified according to ward, age group and civil status	286
“ XXVI—Number and rates per 100,000 population of deaths caused by certain diseases, by five-year period from 1875 to 1944 and per year for 1945 and 1946	288

DEATHS—Continued

	Page
Table XXVII—Deaths by certain contagious and diarrheal diseases clas- sified according to month.....	290
“ XXVIII—Deaths by certain diseases and groups of diseases, and rates per 1,000 population for the years 1944, 1945 and 1946.....	291
“ XXIX—Population and deaths by cause for each racial group....	292
“ XXX—Mean number of deaths, births and marriages and rates per 1,000 population by period of five years from 1872- 1944, with the exception of a period of three years from 1872-1874, and for each year 1945 and 1946.....	293
“ XXXI—Classification of deaths according to the International List of Causes of deaths, sex and age groups.....	294

Table I

**Population of Montréal by sex, race and percentage
corresponding to each race—1946**

Nationalities	Sex		Total	Per- centage
	M	F		
French Canadians.	325,840	344,938	670,778	66.6
English Canadians.	96,143	104,238	200,381	19.9
Jews.	28,379	28,380	56,759	5.6
Other nationalities	43,531	35,551	79,082	7.9
Total.	493,893	513,107	1,007,000	100.0

Table II

**Excess of live births over deaths and rate of natural increase
per 1,000 population by race—1946**

Nationalities	Births	Deaths	Surplus of births over deaths	Natural increase per 1,000 population
French Canadians.	17,451	6,379	11,072	16.5
English Canadians	3,616	2,241	1,375	6.9
Jews.	1,101	475	626	11.0
Other nationalities	1,387	672	715	9.0
Total.	23,555	9,767	13,788	13.7

Table III

Number of marriages and rates per 1,000 population classified
according to race—1946

Nationalities	Total	Rate per 1,000 population
French Canadians.....	7,769	11.6
English Canadians.....	2,670	13.3
Jews.....	565	10.0
Other nationalities.....	665	8.4
Total.....	11,669	11.6

Table IV

Number of live births and rates per 1,000 population by sex
and race—1946

(residents born in and out of Montréal)

Nationalities	Sex		Total	Rate per 1,000 population
	M	F		
French Canadians.....	9,064	8,387	17,451	26.0
English Canadians.....	1,859	1,757	3,616	18.0
Jews.....	567	534	1,101	19.4
Other nationalities.....	723	664	1,387	17.5
Total.....	12,213	11,342	23,555	23.4

Table V

Number of births classified according to month, monthly mean by period of 5 years 1941 to 1946, annual mean and rate per 1,000 population 1941 to 1946

Month	1941	1942	1943	1944	1945	Mean 5 years	1946
January	1,525	1,551	2,009	1,763	1,861	1,742	1,893
February	1,272	1,506	1,669	1,782	1,666	1,579	1,764
March	1,739	1,886	1,878	1,809	1,983	1,859	2,047
April	1,630	1,647	1,841	1,803	1,932	1,771	2,056
May	1,685	1,818	2,000	1,884	1,865	1,850	2,130
June	1,783	1,738	1,821	1,915	1,905	1,832	2,074
July	1,540	1,686	1,800	1,883	1,882	1,758	2,115
August	1,689	1,897	1,811	1,624	1,790	1,762	1,957
September	1,453	1,616	1,867	1,666	1,805	1,681	1,880
October	1,486	1,701	1,792	1,715	1,779	1,695	1,852
November	1,633	1,886	1,559	1,560	1,712	1,670	1,826
December	1,576	1,674	1,548	1,664	1,895	1,672	1,961
Total	19,011	20,606	21,595	21,068	22,075	20,871	23,555
Mean	1,584.2	1,717.2	1,799.6	1,755.7	1,839.6	1,739.0	1,962.9
Per 1,000 population	21.1	22.2	22.7	21.7	22.4	22.0	23.4

Number of legitimate live births classified a
(residents born in a

Parish	Grand Total	TOTAL		Sex	French	English	Irish	Scotch	Jews	Italian	Ruthenian Polish	Negro	Indian	Other races	Unknown
		Male	Female												
St-Alphonse	443	240	203	M F	208 181	15 4	7 6	5 7	.. ..	1 4	1 ..	.. ..	.. ..	3 1	....
St-Ambroise	191	95	96	M F	84 78	5 6	2 ..	1 4	1 ..	2 5	.. ..	.. ..	.. ..	3..	....
St-Anselme	201	106	95	M F	83 73	1 3	2 3	1 ..	.. ..	3 ..	6 8	.. ..	.. ..	10 8	....
St-Antonin	442	237	205	M F	30 28	77 72	30 27	44 30	38 34	1 1	1 ..	.. ..	.. ..	16 12	.. 1
St-Arsène	295	154	141	M F	128 123	3 4	7 6	1 1	1 ..	8 5	.. ..	.. ..	.. ..	6 1	....
St-Barthélémy	332	190	142	M F	155 119	6 7	6 1	4 ..	1 2	12 9	.. ..	.. ..	.. ..	6 4	....
St-Bernard	89	43	46	M F	38 40	5 3	.. 1	.. ..	.. ..	.. 1	.. ..	.. ..	.. ..	1..	....
Ste-Bernadette	9	5	4	M F	3 1	.. 1	.. ..	.. ..	.. 1	1 ..	.. 1	.. ..	.. ..	1..	....
St-Bernardin	14	8	6	M F	7 4	.. ..	1 ..	.. ..	.. ..	.. 2	....	....	....	....	....
Ste-Brigide	414	215	199	M F	203 187	3 2	1 4	2 2	.. ..	3 1	.. 1	.. ..	.. ..	3 1	....
Cathédrale	460	262	198	M F	85 57	78 63	24 22	38 19	13 15	3 4	1 3	1 ..	1 ..	18 15	....
Ste-Catherine	242	116	126	M F	108 118	2 2	2 1	.. ..	.. ..	2 5	.. ..	.. ..	.. ..	2..	....
Ste-Cécile	393	209	184	M F	165 141	4 5	7 4	3 ..	.. 1	26 26	1 ..	.. ..	.. ..	3 7	....
St-Charles	473	269	204	M F	194 141	16 22	26 10	9 9	.. ..	10 3	4 5	.. ..	.. 1	10 13	....
Christ-Roi	63	32	31	M F	29 28	.. ..	2 1	.. ..	.. ..	1 1	.. ..	.. ..	.. ..	.. 1	....
Ste-Claire	129	70	59	M F	64 48	2 4	.. 1	2 4	.. ..	2 ..	.. ..	.. ..	.. ..	.. 2	....
St-Clément	360	182	178	M F	133 122	25 34	10 11	12 7	.. ..	.. 1	.. ..	.. ..	.. ..	2 3	....
Ste-Clotilde	116	62	54	M F	59 51	1 1	.. 1	.. ..	.. ..	2 1	....	....	....	....	....
Cœur-Imm.-Marie . .	54	24	30	M F	15 16	5 6	3 4	.. 2	.. ..	1 ..	.. 1	.. ..	.. ..	.. 1	....
Ste-Cunégonde	386	205	181	M F	153 145	12 12	19 15	4 1	1 1	12 1	.. ..	.. 1	2 1	2 4	....
St-Denis	393	200	193	M F	178 172	4 6	7 2	2 5	.. ..	2 2	.. ..	.. ..	.. ..	7 6	....
St-Edouard	405	212	193	M F	183 179	5 3	8 2	5 3	2 ..	8 5	.. ..	.. ..	.. ..	1 1	....
Carried forward . .	5,904	3,136	2,768	M F	2,305 2,052	269 260	164 122	133 94	57 54	100 77	14 19	1 1	3 2	90 84	....

I
 According to French-Canadian parishes, sex and race
 (out of Montréal)—1946

Parish	Grand Total	TOTAL		Sex	French	English	Irish	Scotch	Jews	Italian	Ruthenian Polish	Negro	Indian	Other races	Unknown
		Male	Female												
Carried	5,904	3,136	2,768	M F	2,305 2,052	269 260	164 122	133 94	57 54	100 77	14 19	1 1	3 2	90 84	.. 3
St-Elizabeth	110	52	58	M F	46 48	1 4	.. 1	.. 1	.. ..	5 4	....	....	....	....	....
St-Enfant-Jésus	582	291	291	M F	152 147	13 10	8 3	1 6	109 116	3 4	.. 2	.. ..	.. ..	5 3	....
St-Etienne	190	99	91	M F	90 83	8 4	1 ..	.. ..	.. ..	.. 3	.. ..	.. ..	.. ..	.. 1	....
St-Eusèbe	354	188	166	M F	175 154	1 ..	4 5	1 2	.. ..	2 1	2 1	.. ..	.. ..	3 3	....
St-François-d'Assise	164	100	64	M F	87 60	6 4	3 ..	2 ..	1 ..	1..	....	....	....	....	....
St-François-Solano	189	95	94	M F	62 74	16 9	5 4	8 4	.. ..	1 2	.. ..	.. ..	.. ..	3 1	....
St-Georges	242	139	103	M F	51 40	13 10	10 13	4 1	54 37	.. 1	1 1	.. ..	.. ..	6..	....
St-Germain	53	25	28	M F	13 9	1 2	.. 1	1 ..	10 16	....	....	....	....	....	....
St-Hélène	160	84	76	M F	63 61	7 8	5 6	1 ..	.. ..	3 1	.. ..	.. ..	.. ..	5..	....
St-Henri	376	188	188	M F	175 169	8 5	1 4	.. 3	.. 1	2 5	1 ..	.. ..	.. ..	1 1	....
St-Herménégilde	40	23	17	M F	14 12	5 2	1 1	1 1	.. ..	.. ..	.. ..	.. ..	.. ..	2 1	....
Imm.-Conception	437	211	226	M F	194 212	6 3	2 ..	3 1	.. ..	3 6	.. 1	.. ..	.. ..	3 3	....
St-Irénée	168	99	69	M F	89 59	3 4	5 2	.. 1	.. ..	2 1	.. ..	.. 1	.. ..	.. 1	....
St-Jacques	504	281	223	M F	254 202	2 2	5 4	1 1	.. 1	6 2	1 1	1 1	.. 1	11 8	....
St-Jean-Baptiste	538	268	270	M F	187 187	6 8	3 7	.. 3	58 57	5 ..	.. ..	1 ..	1 ..	7 8	....
S.-Jean-Bte-la-Salle	260	128	132	M F	113 116	2 10	2 3	6 3	2 ..	1 ..	.. ..	.. ..	1 ..	1..	....
St-Jean-Berchmans	479	259	220	M F	213 184	12 9	7 5	1 2	6 1	16 12	.. 1	.. ..	.. ..	4 6	....
St-Jean-Damascène	69	36	33	M F	24 30	8 1	1 ..	.. 1	.. ..	3 ..	.. ..	.. ..	.. ..	.. 1	....
St-Jean-de-la-Croix	374	201	173	M F	153 123	15 7	3 6	2 2	2 1	26 31	.. 2	.. ..	.. ..	.. 1	....
St-Jean-de-Matha	114	54	60	M F	41 47	8 4	1 3	1 1	.. ..	3 4	.. ..	.. ..	.. ..	.. 1	....
St-Jean-l'Evang.	240	120	120	M F	51 37	34 40	15 25	11 11	.. 1	.. ..	2 2	.. ..	.. ..	7 4	....
Carried forward	11,547	6,077	5,470	M F	4,552 4,106	444 406	246 215	177 138	299 285	182 154	21 30	3 3	5 3	148 127	.. 3

Number of legitimate live births classified a
(residents born in a

Parish	Grand Total	TOTAL		Sex	French	English	Irish	Scotch	Jews	Italian	Ruthenian Polish	Negro	Indian	Other races	Unknown
		Male	Female												
Carried	11,547	6,077	5,470	M F	4,552 4,106	444 406	246 215	177 138	299 285	182 154	21 30	3 3	5 3	148 127	.. 3
St-Jean-Marie- Vianney	82	44	38	M F	36 34	.. 4	1 ..	.. ..	.. ..	3 ..	.. ..	.. ..	.. ..	4..	....
Ste-Jeanne-d'Arc . . .	236	109	127	M F	97 116	5 1	1 1	1 2	.. 2	4 4	.. ..	.. ..	.. ..	1 1	....
St-Joseph	255	126	129	M F	85 82	12 17	7 8	6 8	.. ..	10 6	1 ..	.. 4	.. 1	5 3	....
St-Joseph-de- Bordeaux	68	35	33	M F	33 29	1 1	.. ..	.. 1	.. ..	.. ..	.. ..	.. ..	.. ..	1 1	.. 1
St-Joseph-du- Mont-Royal	5	4	1	M F	.. ..	2 ..	2 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	....
St-Léon	96	48	48	M F	15 13	9 13	7 8	7 5	4 4	1 0	1 0	.. ..	.. ..	4 5	....
St-Louis-de-France .	467	255	212	M F	158 144	6 2	3 4	.. 3	38 28	5 4	2 ..	2 ..	.. ..	41 27	....
St-Louis-de- Gonzague	185	97	88	M F	84 77	1 1	5 1	2 5	.. ..	3 1	.. ..	.. ..	.. ..	2 3	....
St-Marc	433	218	215	M F	169 162	19 23	14 6	4 10	.. 7	5 3	.. ..	.. ..	.. ..	7 4	....
Ste-Marguerite- Marie	224	120	104	M F	115 101	1 1	3 1	.. 1	.. ..	.. ..	.. ..	.. ..	.. ..	1..	....
Saints-Martyrs- Canadiens	44	22	22	M F	19 20	.. ..	1 1	.. ..	.. ..	1 ..	.. ..	.. ..	.. ..	1 1	....
Nativité	594	295	299	M F	275 274	6 11	4 4	2 2	1 ..	1 1	1 2	.. ..	.. ..	5 5	....
St-Nicolas	113	53	60	M F	39 50	7 2	2 2	1 2	.. ..	3 2	.. ..	.. ..	.. ..	1 2	....
St-Nom-de-Jésus . . .	549	282	267	M F	244 227	15 21	13 6	5 8	.. ..	4 3	.. ..	.. ..	.. ..	1 2	....
Notre-Dame	632	328	304	M F	179 152	31 41	34 36	10 13	32 24	5 3	3 2	1 1	.. ..	33 32	....
N.-D.-des-Anges . . .	98	61	37	M F	48 29	9 3	1 2	1 1	.. ..	1 ..	.. ..	.. ..	.. ..	1 2	....
N.-D.-de-Grâce . . .	633	303	330	M F	78 72	101 127	41 46	40 47	23 25	5 5	1 2	.. ..	.. ..	14 6	....
N.-D.-des-Neiges . . .	411	210	201	M F	53 49	41 41	13 16	25 22	67 65	2 1	.. 2	.. ..	.. ..	9 5	....
Notre-Dame-du- Bois-Franc	35	15	20	M F	6 8	2 9	3 1	2 1	.. ..	.. ..	.. 1	.. ..	.. ..	2..	....
N.-D.-du-Foyer	30	15	15	M F	15 15	....	....	....	....	....	....	....	....	....	....
N.-D.-du-Rosaire . . .	430	219	211	M F	187 192	12 8	4 1	2 2	.. ..	10 4	.. 2	.. ..	.. ..	4 2	....
Carried forward . .	17,167	8,936	8,231	M F	6,487 5,952	724 732	405 359	285 271	464 440	245 191	30 41	6 8	5 4	285 229	.. 4

I

ording to French-Canadian parishes, sex and race
ut of Montréal)—(End) 1946

Parish	Grand Total	TOTAL		Sex	French	English	Irish	Scotch	Jews	Italian	Ruthenian Polish	Negro	Indian	Other races	Unknown
		Male	Female												
Carried	17,167	8,936	8,231	M F	6,487 5,952	724 732	405 359	285 271	464 440	245 191	30 41	6 8	5 4	285 229	.. 4
N.-D.-du- Perpétuel-Secours.	290	160	130	M F	129 112	10 3	7 3	2 2	.. ..	6 8	3 ..	.. ..	.. ..	3 2	....
N.-D.-du-Saint- Sacrement.	178	93	85	M F	86 82	1 1	2 1	1 ..	1 1	2..	....	....	....	....	....
N.-D.-des-Victoires.	96	51	45	M F	40 39	4 3	3 1	.. 1	.. ..	.. ..	2 ..	.. ..	.. ..	2 1	....
St-Pascal	248	136	112	M F	28 29	21 12	7 7	15 5	60 57	.. ..	.. ..	.. ..	.. ..	5 2	....
St-Paul	293	167	126	M F	139 104	13 8	4 6	1 5	.. ..	5 2	1 ..	.. ..	.. ..	4 1	....
St-Paul-de-la-Croix.	97	61	36	M F	52 31	5 2	1 2	2 ..	.. ..	1 ..	.. ..	.. ..	.. ..	.. 1	....
St-Pierre	251	126	125	M F	120 117	1 1	2 2	.. 2	.. ..	2 2	.. ..	.. ..	.. ..	1 1	....
St-Pierre-Claver. . . .	412	204	208	M F	177 174	7 11	3 7	8 3	1 4	4 4	.. 1	.. ..	.. 2	4 2	....
St-Philippe	145	81	64	M F	60 50	7 2	3 3	1 1	1 4	8 2	.. 1	.. ..	.. ..	1 1	....
Ste-Philomène	591	290	301	M F	217 222	43 38	6 16	8 14	.. 1	5 5	.. ..	.. ..	.. ..	11 5	....
St-Raymond	137	78	59	M F	21 16	29 14	9 9	8 8	1 1	6 7	.. 1	.. ..	.. ..	4 3	....
St-Rédempteur	232	118	114	M F	112 98	.. 5	3 6	.. 1	.. 2	.. ..	1 ..	.. ..	.. ..	2 2	....
St-Roch	265	124	141	M F	43 37	38 40	10 24	9 16	16 11	2 4	1 2	.. ..	.. ..	5 7	....
Sacré-Cœur	329	160	169	M F	155 161	1 1	1 2	.. 2	.. ..	2 1	.. ..	.. ..	.. ..	1 2	....
St-Stanislas	478	236	242	M F	218 230	7 2	4 4	1 2	1 ..	2 2	.. ..	.. ..	.. ..	2 2	1 ..
Ste-Thérèse	77	35	42	M F	35 40	.. ..	.. 2	....	....	....	....	....	....	....	....
St-Viateur	55	28	27	M F	2 4	4 2	1 2	2 ..	18 17	.. ..	.. 1	.. ..	.. ..	1 1	....
St-Victor	102	40	62	M F	39 55	.. 1	.. 2	.. ..	.. ..	1 4	....	....	....	....	....
St-Vincent-de-Paul .	342	166	176	M F	163 168	1 1	1 4	1 1	.. ..	.. 1	.. 1	....	....	....	....
St-Vincent-Ferrier . .	297	154	143	M F	130 121	7 6	4 3	1 3	.. ..	7 8	.. ..	.. ..	.. ..	5 2	....
Visitation	98	50	48	M F	43 44	2 2	2 1	.. ..	.. ..	2 1	.. ..	.. ..	.. ..	1..	....
St-Zotique	211	109	102	M F	103 97	.. 1	2 2	1 ..	.. ..	.. 2	1 ..	.. ..	.. ..	2..	....
Total-Legitimate.	22,391	11,603	10,788	M F	8,599 7,983	925 888	480 468	346 337	563 538	300 244	39 48	6 8	5 6	339 264	1 4

Table

Number of illegitimate live births classified as to race
(residents born in a foreign country)

Parish	Grand Total	TOTAL		Sex	French	English	Irish	Scotch	Jews	Italian	Ruthenian Polish	Negro	Indian	Other races	Unknown
		Male	Female												
St-Alphonse	4	1	3	M F	1 1	..	..	..	..	..	..	..	..	..	2
St-Ambroise	2	0	2	M F	.. 1	..	..	..	..	..	..	..	..	..	1
St-Anselme	9	5	4	M F	1 2	1 ..	1 1	..	..	..	..	..	..	..	2 1
St-Antonin	8	5	3	M F	1 ..	1 1	..	2 ..	.. 1	..	..	..	..	..	1 1
St-Arsène	3	1	2	M F	.. 1	..	..	..	..	..	..	..	..	..	1 1
St-Barthélémy	7	3	4	M F	2 2	1 ..	.. 1	..	..	..	..	..	..	..	.. 1
St-Bernard	2	1	1	M F	1 ..	..	..	..	..	..	..	..	..	..	.. 1
Ste-Bernadette	0	0	0	M F	..	..	..	..	..	..	..	..	..	..	..
St-Bernardin	0	0	0	M F	..	..	..	..	..	..	..	..	..	..	..
Ste-Brigide	11	7	4	M F	4 2	..	..	..	..	..	..	..	1 ..	..	2 2
Cathédrale	52	24	28	M F	6 5	8 7	7 5	1 6	.. 2	..	1 ..	..	..	1 2	.. 1
Ste-Catherine	3	2	3	M F	2 2	..	..	..	..	..	..	..	..	..	.. 1
Ste-Cécile	2	1	1	M F	.. 1	..	..	..	..	..	..	..	..	..	.. 1
St-Charles	18	12	6	M F	3 4	7 1	.. 1	..	..	..	..	..	..	1 ..	1 ..
Christ-Roi	1	1	0	M F	1..	..	..	..	..	..	..	..	..	..	..
Ste-Claire	4	2	2	M F	2 2	..	..	..	..	..	..	..	..	..	..
St-Clément	4	2	2	M F	.. 1	1 1	..	..	..	..	..	..	..	..	1 ..
Ste-Clotilde	0	0	0	M F	..	..	..	..	..	..	..	..	..	..	..
Cœur-Immaculé-de-Marie	2	2	0	M F	..	1 ..	1..	..	..	..	..	..	..	..	..
Ste-Cunégonde	9	4	5	M F	2 1	1 2	1 1	.. 1	..	..	..	..	..	..	....
St-Denis	5	3	2	M F	1 ..	..	..	..	..	..	..	..	..	.. 1	2 1
St-Edouard	5	4	1	M F	1 ..	..	..	..	..	..	..	..	..	..	3 1
Carried forward	153	80	73	M F	28 25	21 12	10 9	3 7	.. 3	..	1 ..	..	1 ..	2 3	14 14

II
According to French-Canadian parishes, sex and race
(out of Montréal) 1946

Parish	Grand Total	TOTAL		Sex	French	English	Irish	Scotch	Jews	Italian	Ruthenian Polish	Negro	Indian	Other races	Unknown
		Male	Female												
Carried	153	80	73	M F	28 25	21 12	10 9	3 7	.. 3	.. ..	1 ..	.. ..	1 ..	2 3	14 14
Ste-Elizabeth	3	2	1	M F	1 ..	1 ..	.. ..	.. ..	.. ..	1..	....	....	....	....	....
St-Enfant-Jésus	7	1	6	M F	.. 3	.. 1	.. ..	.. ..	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 1
St-Etienne	3	1	2	M F	1 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1
St-Eusèbe	7	4	3	M F	3 3	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1..	....
St-François-d'Assise	1	1	0	M F	.. ..	1..	....	....	....	....	....	....	....	....	....
St-François-Solano	2	0	2	M F	.. 1	.. 1	....	....	....	....	....	....	....	....	....
St-Georges	11	5	6	M F	3 2	.. ..	.. ..	1 1	1 ..	.. ..	.. ..	.. ..	.. ..	1 1	2 1
St-Germain	1	0	1	M F	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1
Ste-Hélène	10	6	4	M F	2 1	.. ..	.. 1	2 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2 2
St-Henri	2	1	1	M F	.. 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..
St-Herménégilde	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
Imm.-Conception	8	3	5	M F	1 3	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 2
St-Irénée	4	2	2	M F	1 1	.. 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..
St-Jacques	716	382	334	M F	350 318	11 3	6 2	4 2	.. ..	1 2	3 ..	.. ..	1 ..	1 4	5 3
St-Jean-Baptiste	9	5	4	M F	2 2	.. ..	.. ..	.. ..	2 ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 2
St-Jean-Bte-de-la-Salle	16	8	8	M F	6 6	1 1	1 1	....	....	....	....	....	....	....	....
St-Jean-Berchmans	2	1	1	M F	1 1	....	....	....	....	....	....	....	....	....	....
St-Jean-Damascène	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
St-Jean-de-la-Croix	5	3	2	M F	1 1	.. 1	.. ..	.. ..	.. ..	2..	....	....	....	....	....
St-Jean-de-Matha	1	0	1	M F	.. ..	.. 1	....	....	....	....	....	....	....	....	....
St-Jean-l'Evangéliste	3	3	0	M F	1 ..	1 ..	1..	....	....	....	....	....	....	....	....
Carried forward	964	508	456	M F	401 369	37 21	18 13	9 10	2 5	3 3	4 ..	.. ..	2 ..	4 8	28 27

Tab
Number of illegitimate live births classified according to race
(residents, dying in an

Parish	Grand Total	TOTAL		Sex	French	English	Irish	Scotch	Jews	Italian	Ruthenian Polish	Negro	Indian	Other races	Unknown
		Male	Female												
Carried	964	508	456	M F	401 369	37 21	18 13	9 10	2 5	3 3	4 ..	.. ..	2 ..	4 8	28 27
St-Jean-Marie- Vianney	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
Ste-Jeanne-d'Arc . . .	1	0	1	M F	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..
St-Joseph	12	6	6	M F	5 1	1 2	.. 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. 1
St-Joseph-de- Bordeaux	1	0	1	M F	.. 1	....	....	....	....	....	....	....	....	....	....
St-Joseph-du- Mont-Royal	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
St-Léon	1	1	0	M F	.. ..	.. ..	.. ..	1..	....	....	....	....	....	....	....
St-Louis-de- France	17	7	10	M F	3 3	.. ..	1 1	.. ..	1 ..	.. ..	.. ..	.. ..	.. ..	1 1	1 5
St-Louis-de- Gonzague	1	0	1	M F	.. 1	....	....	....	....	....	....	....	....	....	....
St-Marc	3	2	1	M F	.. ..	2 1	....	....	....	....	....	....	....	....	....
Ste-Marguerite- Marie	3	1	2	M F	1 1	.. ..	.. ..	.. ..	.. ..	1..	....	....	....	....	....
Saints-Martyrs- Canadiens	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
Nativité	6	3	3	M F	2 2	1 1	....	....	....	....	....	....	....	....	....
St-Nicolas	1	1	0	M F	1..	....	....	....	....	....	....	....	....	....	....
St-Nom-de-Jésus . . .	8	4	4	M F	3 4	1..	....	....	....	....	....	....	....	....	....
Notre-Dame	44	25	19	M F	8 4	7 9	2 1	3 2	.. ..	.. ..	.. ..	.. ..	1 1	4 1	1 1
N.-D.-des-Anges . . .	2	0	2	M F	.. 1	.. 1	....	....	....	....	....	....	....	....	....
N.-D.-de-Grâce . . .	31	16	15	M F	1 3	8 1	3 6	1 1	1 ..	.. ..	.. ..	.. ..	.. ..	1 2	1 2
N.-D.-des-Neiges . . .	7	2	5	M F	.. 2	.. 1	.. ..	2 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..
Notre-Dame-du- Bois-Franc	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
N.-D.-du-Foyer . . .	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
N.-D.-du-Rosaire . . .	5	3	2	M F	1 2	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..
Notre-Dame-du- Perpétuel-Secours . .	3	1	2	M F	.. ..	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 2
Carried forward . .	1,110	580	530	M F	426 392	59 38	24 13	15 14	4 5	3 4	4 ..	.. ..	3 1	10 13	32 40

VII
to French-Canadian parishes, sex and race
out of Montréal) — (End) 1946

Parish	Grand Total	TOTAL		Sex	French	English	Irish	Scotch	Jews	Italian	Ruthenian Polish	Negro	Indian	Other races	Unknown
		Male	Female												
Carried	1,110	580	530	M F	426 392	59 38	24 13	15 14	4 5	3 4	4 ..	.. ..	3 1	10 13	32 40
Notre-Dame-du- St-Sacrement	1	1	0	M F	1..	....	....	....	....	....	....	....	....	....	....
Notre-Dame-des- Victoires	1	1	0	M F	1..	....	....	....	....	....	....	....	....	....	....
St-Pascal	5	3	2	M F	.. ..	1 1	.. ..	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..	.. 1
St-Paul	2	1	1	M F	.. ..	.. ..	1 1	....	....	....	....	....	....	....	....
St-Paul-de-la- Croix	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
St-Pierre	1	1	0	M F	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 ..
St-Pierre-Claver . . .	1	0	1	M F	1..	....	....	....	....	....	....	....	....	....	....
St-Philippe	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
Ste-Philomène	4	1	3	M F	1 1	.. 1	.. ..	.. 1	....	....	....	....	....	....	....
St-Raymond	2	2	0	M F	1 ..	1..	....	....	....	....	....	....	....	....	....
St-Rédempteur	2	0	2	M F	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1
St-Roch	4	2	2	M F	.. ..	2 1	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1
Sacré-Cœur	8	4	4	M F	3 2	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	1 2
St-Stanislas	7	3	4	M F	2 ..	1 1	1 ..	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2 ..
Ste-Thérèse	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
St-Viateur	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
St-Victor	0	0	0	M F	....	....	....	....	....	....	....	....	....	....	....
St-Vincent-de-Paul .	6	4	2	M F	1 ..	.. ..	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	4 ..
St-Vincent-Ferrier . .	1	0	1	M F	1..	....	....	....	....	....	....	....	....	....	....
Visitation	3	3	0	M F	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2 ..
St-Zotique	6	4	2	M F	1 2	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	3 ..
Total— Illegitimate	1,164	610	554	M F	435 405	63 41	25 25	18 15	4 5	3 4	4 ..	.. ..	2 1	11 13	45 45
Grand total	23,555	12,213	11,342	M F	9,034 8,388	988 929	505 493	364 352	567 543	303 248	43 48	6 8	7 7	350 277	46 49

Table VIII

Number of deaths classified according to month, annual mean for each year and by period of five years, and annual rates per 1,000 population—1941-1946

(residents dying in and out of Montréal)

Month	1941	1942	1943	1944	1945	Mean 5 years	1946
January	922	861	927	949	817	895	988
February	812	811	804	824	783	807	800
March	881	854	850	847	858	858	867
April	766	816	873	904	841	840	808
May	805	818	891	904	780	840	805
June	807	721	788	770	766	770	864
July	779	765	829	754	760	777	760
August	768	755	758	852	682	763	704
September	735	680	734	723	767	728	693
October	828	804	795	816	747	798	760
November	802	759	830	761	766	784	796
December	806	888	1,103	804	914	903	922
Total	9,711	9,532	10,182	9,908	9,481	9,763	9,767
Mean	809.2	794.3	848.5	825.7	790.1	831.6	813.9
Per 1,000 population	10.8	10.3	10.7	10.2	9.6	10.3	9.7

Table IX

Deaths classified according to age group, month, season and year 1941-1946
(residents dying in and out of Montréal)

AGES	1st quarter (Winter)				2nd quarter (Spring)				3rd quarter (Summer)				4th quarter (Autumn)				Grand total
	January	February	March	Total 1st quarter	April	May	June	Total 2nd quarter	July	August	September	Total 3rd quarter	October	November	December	Total 4th quarter	
Under a month.....	74	51	72	197	70	62	72	204	69	59	53	181	51	69	71	191	773
From 1 to 5 months.....	28	20	32	80	18	15	27	60	12	19	22	53	22	17	42	81	274
From 6 to 11 months.....	11	6	11	28	13	10	21	44	4	3	9	16	9	3	13	25	113
1 year.....	6	7	6	19	10	6	6	22	5	5	6	16	4	7	6	17	74
2 years.....	6	3	6	15	5	3	2	10	1	4	3	8	3	3	0	6	39
3 years.....	7	2	1	10	3	0	5	8	4	5	2	11	2	3	6	11	40
4 years.....	1	1	1	3	2	2	3	7	3	0	2	5	1	3	5	9	24
Total under 5 years.....	133	90	129	352	121	98	136	355	98	85	97	290	92	105	143	340	1,337
Over 5 years.....	855	710	738	2,303	687	707	728	2,122	662	609	596	1,867	668	691	779	2,138	8,430
Grand total.....	988	800	867	2,655	808	805	864	2,477	760	704	693	2,157	760	796	922	2,478	9,767
Grand total in 1945.....	817	783	858	2,458	841	780	766	2,387	760	682	767	2,209	747	766	914	2,427	9,481
Grand total in 1944.....	949	824	847	2,620	904	904	770	2,578	754	852	723	2,329	816	761	804	2,381	9,908
Grand total in 1943.....	927	804	850	2,581	873	891	788	2,552	829	758	734	2,321	795	830	1,103	2,728	10,182
Grand total in 1942.....	861	811	854	2,526	816	818	721	2,355	765	755	680	2,200	804	759	888	2,451	9,532
Grand total in 1941.....	922	812	881	2,615	766	805	807	2,378	779	768	735	2,282	828	802	806	2,436	9,700

Number of deaths by age and age group, classified according to sex and race, corresponding to the age group (residents dying in and out of hospital)

AGES		Legitimates					Total
		French-Canadians	British-Canadians	Jews	Other nationalities	Unknown	
Premature children.....	M	143	21	8	6	....	178
	F	95	21	2	4	....	122
From 0 to 1 month.....	M	186	28	6	22	....	242
	F	120	23	5	5	....	153
From 1 month to 5 months.....	M	99	17	6	3	....	125
	F	87	13	4	4	....	108
From 6 months to 11 months.....	M	48	7	....	2	....	57
	F	39	3	....	....	1	43
Total under 1 year.....	M	476	73	20	33	....	602
	F	341	60	11	13	1	426
1 year.....	M	40	2	1	2	....	45
	F	22	4	....	2	....	28
2 years.....	M	13	5	2	2	....	22
	F	17	....	....	....	....	17
3 years.....	M	19	5	3	....	....	27
	F	10	2	....	1	....	13
4 years.....	M	12	2	....	1	....	15
	F	7	2	....	....	....	9
Total under 5 years.....	M	560	87	26	38	....	711
	F	397	68	11	16	1	493
From 5 years to 9 years.....	M	35	8	....	....	....	43
	F	25	5	....	2	....	32
From 10 years to 14 years.....	M	23	4	1	1	....	29
	F	18	3	1	1	....	23
From 15 years to 19 years.....	M	53	6	....	10	....	69
	F	48	10	....	5	....	63
From 20 years to 24 years.....	M	53	14	1	9	....	77
	F	74	18	1	9	....	102
From 25 years to 29 years.....	M	45	15	2	9	....	71
	F	65	14	3	5	....	87
From 30 years to 34 years.....	M	75	23	4	7	....	109
	F	72	21	6	6	....	105
From 35 years to 39 years.....	M	92	24	9	9	....	134
	F	88	20	4	10	....	122
From 40 years to 44 years.....	M	158	24	7	24	....	213
	F	103	28	8	9	....	148
From 45 years to 49 years.....	M	159	67	21	32	....	279
	F	144	28	9	12	....	193
From 50 years to 54 years.....	M	247	85	16	55	....	403
	F	188	48	16	14	....	266
From 55 years to 59 years.....	M	282	101	26	65	....	474
	F	189	68	22	17	....	296
From 60 years to 64 years.....	M	297	160	39	67	....	563
	F	226	78	16	20	....	340
From 65 years to 69 years.....	M	339	179	31	59	....	608
	F	261	98	30	25	....	414
From 70 years to 79 years.....	M	597	275	55	62	....	989
	F	620	285	63	27	....	995
From 80 years to 89 years.....	M	243	136	21	23	....	423
	F	387	185	22	20	....	614
90 years and over.....	M	32	13	2	....	....	47
	F	58	39	1	1	....	99
Total over 5 years.....	M	2,730	1,134	235	432	....	4,531
	F	2,566	948	202	183	....	3,899
Grand total.....	M	3,290	1,221	261	470	....	5,242
	F	2,963	1,016	213	199	1	4,392

X

to sex, legitimacy, racial origin, and percentage of the total
each group—1946
out of Montréal)

Illegitimates					Total	Sex		Grand total	Percentage of total deaths
French- Canadians	British- Canadians	Jews	Other nationalities	Unknown		Male	Female		
13	1	....	....	....	14				
20	1	....	21	192	143	335	3.43
22	2	....	....	....	24				
18	1	....	....	19	266	172	438	4.48
25	1	....	1	....	27				
14	14	152	122	274	2.81
8	8				
5	5	65	48	113	1.16
68	4	....	1	....	73				
57	1	1	....	59	675	485	1,160	11.88
....	0				
1	1	45	29	74	0.76
....	0				
....	0	22	17	39	0.40
....	0				
....	0	27	13	40	0.41
....	0				
....	0	15	9	24	0.24
68	4	....	1	....	73				
58	1	1	....	60	784	553	1,337	13.69
....	0				
....	0	43	32	75	0.77
....	0				
....	0	29	23	52	0.53
....	0				
....	0	69	63	132	1.35
....	0				
....	0	77	102	179	1.83
....	0				
....	0	71	87	158	1.62
....	0				
....	0	109	105	214	2.19
....	0				
....	0	134	122	256	2.62
....	0				
....	0	213	148	361	3.70
....	0				
....	0	279	193	472	4.83
....	0				
....	0	403	266	669	6.85
....	0				
....	0	474	296	770	7.88
....	0				
....	0	563	340	903	9.25
....	0				
....	0	608	414	1,022	10.46
....	0				
....	0	989	995	1,984	20.31
....	0				
....	0	423	614	1,037	10.62
....	0				
....	0	47	99	146	1.50
....	0				
....	0	4,531	3,899	8,430	86.31
68	4	....	1	....	73				
58	1	1	....	60	5,315	4,452	9,767	100.00

Table XI

**Number of deaths by age group and by month classified
according to racial origin—1946
(residents dying in and out of Montréal)**

Nationalities		French Canadians	English Canadians	Jews	Other nationalities	Unknown	Grand total
		Deaths	Deaths	Deaths	Deaths	Deaths	
January:	Under 5 years.....	112	16	2	3	0	133
	Over 5 years.....	543	209	57	46	0	855
	Total.....	655	225	59	49	0	988
February:	Under 5 years.....	70	12	3	5	0	90
	Over 5 years.....	445	175	33	57	0	710
	Total.....	515	187	36	62	0	800
March:	Under 5 years.....	99	21	3	6	0	129
	Over 5 years.....	466	184	35	53	0	738
	Total.....	565	205	38	59	0	867
April:	Under 5 years.....	107	5	3	6	0	121
	Over 5 years.....	428	164	32	63	0	687
	Total.....	535	169	35	69	0	808
May:	Under 5 years.....	77	17	1	3	0	98
	Over 5 years.....	426	196	34	51	0	707
	Total.....	503	213	35	54	0	805
June:	Under 5 years.....	108	15	6	7	0	136
	Over 5 years.....	461	180	37	50	0	728
	Total.....	569	195	43	57	0	864
July:	Under 5 years.....	79	11	3	5	0	98
	Over 5 years.....	413	148	43	58	0	662
	Total.....	492	159	46	63	0	760
August:	Under 5 years.....	78	11	1	4	1	95
	Over 5 years.....	394	139	27	49	0	609
	Total.....	472	150	28	53	1	704
September:	Under 5 years.....	80	9	3	5	0	97
	Over 5 years.....	366	159	25	46	0	596
	Total.....	446	168	28	51	0	693
October:	Under 5 years.....	75	11	3	3	0	92
	Over 5 years.....	428	158	42	40	0	668
	Total.....	503	169	45	43	0	760
November:	Under 5 years.....	76	18	5	6	0	105
	Over 5 years.....	422	175	45	49	0	691
	Total.....	498	193	50	55	0	796
December:	Under 5 years.....	122	13	5	3	0	143
	Over 5 years.....	504	195	27	53	0	779
	Total.....	626	208	32	56	0	922
Total:	Under 5 years.....	1,083	159	38	56	1	1,337
	Over 5 years.....	5,296	2,082	437	615	0	8,430
	Total.....	6,379	2,241	475	671	1	9,767

Table XII

Number of births (excluding stillbirths) and deaths of infants under one year, legitimate and illegitimate, and death rates per 1,000 live births for each year and by period of five years—1915-1946

(residents born or dying in and out of Montréal)

Years	Number of births		Number of deaths 0 to 1 year		Rate per 1,000 births		Total Mortal- ity per 1,000 births
	Legit- imate	Illegit- imate	Legit- imate	Illegit- imate	Legit- imate	Illegit- imate	
1	2	3	4	5	6	7	8
1915.....	19,945	747	3,233	546	162.1	730.9	182.6
1916.....	19,084	675	3,134	538	164.2	797.0	185.8
1917.....	19,038	626	2,872	616	150.8	984.0	177.4
1918.....	19,654	719	3,256	646	165.7	898.4	191.5
1919.....	19,159	800	2,945	598	153.7	747.5	177.5
Average.....	19,376	713	3,088	589	159.4	826.1	183.0
1920.....	20,305	875	3,375	697	166.3	796.6	192.2
1921.....	20,221	925	2,599	690	128.5	745.9	155.6
1922.....	19,663	1,057	2,538	766	129.1	724.7	159.4
1923.....	19,435	1,092	2,238	819	115.2	750.0	148.9
1924.....	20,386	1,114	2,273	878	111.5	788.1	146.5
Average.....	20,002	1,013	2,605	770	130.2	760.1	160.6
1925.....	20,805	1,171	2,221	469	106.8	400.4	122.4
1926.....	19,986	1,112	2,088	433	104.5	389.5	119.5
1927.....	19,893	847	2,301	394	102.1	465.2	116.9
1928.....	19,374	933	2,488	431	128.4	461.9	143.7
1929.....	19,417	998	2,239	462	115.3	462.9	132.3
Average.....	19,895	1,012	2,213	438	111.2	432.8	126.8
1930.....	19,974	1,019	2,162	458	108.3	449.4	124.8
1931.....	19,634	1,065	1,824	521	92.9	489.2	113.3
1932.....	18,965	1,032	1,525	454	80.4	439.9	98.9
1933.....	17,388	1,043	1,316	501	75.7	480.3	98.6
1934.....	17,495	938	1,375	299	78.6	318.8	90.8
Average.....	18,691	1,019	1,640	447	87.7	438.7	105.9
Average 20 years.....	19,491	939	2,386	561	122.4	597.4	144.2
1935.....	16,288	1,073	1,268	334	77.8	311.3	92.3
1936.....	15,761	964	1,053	351	66.8	364.1	83.9
1937.....	16,072	1,108	1,226	321	76.3	289.7	90.0
1938.....	16,075	987	1,057	263	65.8	266.5	77.4
1939.....	16,050	1,066	916	307	57.1	288.0	71.5
Average.....	16,049	1,040	1,104	315	68.8	302.9	83.0
1940.....	17,668	1,045	921	189	52.2	179.9	59.3
1941.....	18,011	1,000	977	359	54.2	359.0	70.3
1942.....	19,591	1,015	960	230	49.0	226.6	57.8
1943.....	20,474	1,121	1,112	311	54.3	277.4	65.9
1944.....	19,964	1,104	1,208	248	60.5	224.6	69.1
Average.....	19,142	1,057	1,036	267	54.1	252.6	64.5
1945.....	20,948	1,129	1,197	154	57.1	136.4	61.2
1946.....	22,391	1,164	1,028	132	45.9	113.4	49.2

Table XIII
Number of deaths among embryos and fetuses (under six months and a half of gestation), classified according to cause, sex and duration of pregnancy—1946
(residents dying in and out of Montréal)

Causes of stillbirths	Under 4 months				4 months			5 and 6 months			Grand total				
	M.	F.	Unkn	Tot.	M.	F.	Tot.	M.	F.	Unkn	Tot.	M.	F.	Unkn	Tot.
I—Caused by disease in, or accident to, the mother:															
1—Chronic disease in the mother															
(a) Syphilis.....	..	..	..	0	4	2	6	..	..	4	0	4	2	0	6
(b) Other (tuberculosis, chronic nephritis, chronic heart disease, diabetes, mellitus, chronic poisoning, etc.).....	7	5	..	12	7	4	11	6	4	20	0	20	13	0	33
2—Acute disease in, or accident to, the mother.....	6	2	..	8	4	4	8	15	19	25	0	25	25	0	50
(a) Toxemia during pregnancy.....	11	7	..	18	4	3	7	16	8	31	0	31	18	0	49
(b) Other (retroplacental hemorrhage, detachment of normally inserted placenta).....	1	1	1	3	..	2	2	1	..	2	1	2	3	1	6
3—Over-exertion.....	4	5	2	11	5	4	9	8	7	17	2	17	16	2	35
4—External violence.....	3	6	1	10	2	2	4	1	3	6	1	6	11	1	18
5—Others.....															
II—Anomalies of the fetus, placenta, or cord:															
6—Congenital malformations incompatible with life...	2	3	..	5	1	1	2	10	7	13	0	13	11	0	24
7—Vicious insertion of placenta.....	4	3	..	7	2	2	4	5	1	11	0	11	6	0	17
8—Other anomalies of the placenta and cord.....	..	..	..	0	2	3	5	4	1	6	0	6	4	0	10
III—Death of the fetus by injury or other causes:															
9—Abnormal presentation of the fetus.....	1	2	..	3	..	..	0	2	1	3	0	3	3	0	6
10—Malformations of pelvis.....	..	2	..	2	1	1	2	2	1	3	0	3	4	0	7
11—Prolapse of the cord.....	..	..	..	0	..	..	0	..	..	0	0	0	0	0	0
12—Prolonged labor or uterine inertia.....	..	..	..	0	..	..	0	..	..	0	0	0	0	0	0
13—Obstetrical operations.....	..	2	..	2	..	..	0	..	..	0	0	0	2	0	2
14—Other causes (malformations of the genital organs, pelvic tumors, ruptured uterus, etc.).....	..	..	..	0	..	..	0	4	1	4	0	4	1	0	5
IV—Stillbirth due to other causes:															
15—Other and unspecified causes.....	8	6	3	17	11	7	18	28	18	47	3	47	31	3	81
Total.....	47	44	7	98	43	35	78	102	71	192	7	192	150	7	349

Table XIV

Number of stillbirths legitimate and illegitimate, classified according to cause of death, sex and duration of pregnancy—1946
(residents dying in and out of Montréal)

Causes of stillbirths	6½ months			7 months			8 months			At full term			Grand total		
	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.
I—Caused by disease in, or accident to, the mother:															
1—Chronic disease in the mother															
(a) Syphilis.....	1	..	1	..	2	2	3	3	6	1	..	1	5	5	10
(b) Other (tuberculosis, chronic nephritis, chronic heart disease, diabetes mellitus, chronic poisoning, etc.).....	1	3	4	2	3	5	2	2	4	3	1	4	8	9	17
2—Acute disease in, or accident to, the mother.....	8	8	16	10	7	17	8	5	13	9	9	18	35	29	64
(a) Toxemia during pregnancy.....															
(b) Other (retroplacental hemorrhage, detachment of normally inserted placenta).....	6	8	14	3	1	4	5	5	10	1	3	4	15	17	32
3—Over-exertion.....	1	1	2	..	2	2	1	..	1	..	..	0	2	3	5
4—External violence.....	2	2	4	1	1	2	1	4	5	4	1	5	8	8	16
5—Others.....	..	3	3	3	2	5	4	5	9	1	3	4	8	13	21
II—Anomalies of the fetus, placenta, or cord:															
6—Congenital malformations incompatible with life....	6	5	11	7	6	13	12	6	18	10	12	22	35	29	64
7—Vicious insertion of placenta.....	1	1	2	3	4	7	..	4	4	2	2	4	6	11	17
8—Other anomalies of the placenta and cord.....	2	2	4	2	5	7	6	5	11	10	8	18	20	20	40
III—Death of the fetus by injury or other causes:															
9—Abnormal presentation of the fetus.....	..	1	1	2	1	3	9	5	14	8	8	16	19	15	34
10—Malformations of pelvis.....	..	..	0	..	1	1	8	7	15	4	2	6	12	10	22
11—Prolapse of the cord.....	1	1	2	2	1	3	11	6	17	12	6	18	26	14	40
12—Prolonged labor or uterine inertia.....	..	..	0	1	1	2	6	5	11	5	4	9	12	10	22
13—Obstetrical operations.....	..	..	0	..	1	1	3	5	8	4	2	6	7	8	15
14—Other causes (malformations of the genital organs, pelvic tumors, ruptured uterus, etc.).....	1	1	2	1	2	3	..	..	0	2	4	6	4	7	11
IV—Stillbirth due to other causes:															
15—Other and unspecified causes.....	2	6	8	5	4	9	16	13	29	12	11	23	35	34	69
Total.....	32	42	74	42	44	86	95	80	175	88	76	164	257	242	499

Table

Number of deaths of infants under one year
(residents dying in

Month	January			February			March			April			May		
CAUSES	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total
Typhoid fever . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Paratyphoid fever . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Meningococcal meningitis . . .	..	..	0	1	..	1	..	..	0	..	..	0	..	1	1
Scarlet fever . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Whooping-cough	1	1	2	..	..	0	..	..	0	..	..	0	..	..	0
Diphtheria . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Pulmonary tuberculosis . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Tuberculosis, other forms . . .	..	1	1	..	..	0	..	..	0	..	2	2	..	..	0
Gonococcal infection . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Syphilis	2	..	2	..	..	0	3	..	3	..	..	0	..	..	0
Influenza	1	3	4	2	..	2	..	..	0	2	1	3	1	2	3
Smallpox . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Measles . . . . .	..	..	0	..	..	0	..	2	2	..	1	1	..	..	0
Poliomyelitis . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Other infectious and para- sitic diseases . . . . .	..	1	1	..	..	0	..	..	0	..	..	0	..	..	0
Cancer . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Pneumonia (107 to 109)	22	3	25	10	6	16	19	7	26	6	3	9	6	4	10
Other diseases of the res- piratory system . . . . .	..	..	0	1	..	1	1	..	1	1	1	2	..	..	0
Diarrhoea and enteritis	2	..	2	2	..	2	6	1	7	3	2	5	2	..	2
Other diseases of the di- gestive system . . . . .	..	..	0	..	..	0	..	..	0	1	..	1	2	..	2
Congenital malformation . . .	11	..	11	9	..	9	18	..	18	23	..	23	17	1	18
Congenital debility	4	..	4	2	..	2	6	..	6	7	..	7	2	..	2
Premature birth	38	..	38	25	..	25	33	..	33	31	..	31	22	..	22
Injury at birth	11	..	11	7	..	7	8	..	8	12	..	12	15	..	15
Diseases of early infancy . . .	9	..	6	5	..	5	5	..	5	2	..	2	6	..	6
Infanticide . . . . .	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0
Accidents . . . . .	..	..	0	1	..	1	2	..	2	..	..	0	1	1	2
Other causes	4	2	6	6	..	6	3	1	4	..	3	3	3	1	4
Total	102	11	113	71	6	77	104	11	115	88	13	101	77	10	87

XV

classified according to cause, age and month—1946

and out of Montréal)

June			July			August			September			October			November			December			Grand Total		
0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total	0 to 5 mos.	6 to 11 mos.	Total
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	0	0	0
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	0	0	0
2	..	2	..	..	0	..	..	0	..	..	0	..	1	1	..	1	1	..	..	0	3	3	6
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	0	0	0
..	..	0	..	..	0	..	..	0	..	..	0	1	..	1	..	..	0	..	..	0	2	1	3
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	1	1	0	1	1
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	1	1	0	1	1
..	1	1	..	..	0	..	..	0	..	..	0	1	1	2	..	..	0	..	1	1	1	5	6
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	0	0	0
4	1	5	..	..	0	..	..	0	1	1	2	1	..	1	..	..	0	..	..	0	11	2	13
..	2	2	..	..	0	..	..	0	..	..	0	1	..	1	..	..	0	..	..	0	7	8	15
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	0	0	0
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	0	3	3
..	..	0	..	..	0	..	..	0	1	..	1	..	1	1	..	..	0	..	..	0	1	1	2
..	1	1	..	..	0	1	..	1	..	..	0	..	..	0	..	..	0	..	..	0	1	2	3
..	1	1	..	1	1	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	0	2	2
7	5	12	1	2	3	3	..	3	7	4	11	10	1	11	6	1	7	24	6	30	121	42	163
..	1	1	..	..	0	1	..	1	..	..	0	..	..	0	..	..	0	3	..	3	7	2	9
5	2	7	4	..	4	10	..	10	8	4	12	4	..	4	5	..	5	10	1	11	61	10	71
1	1	2	1	..	1	..	1	1	..	..	0	2	..	2	..	..	0	1	..	1	8	2	10
21	6	27	20	..	20	11	..	11	12	..	12	19	3	22	20	1	21	20	1	21	201	12	213
3	..	3	6	..	6	7	..	7	3	..	3	0	..	1	3	..	3	4	..	4	48	0	48
30	..	30	28	..	28	28	..	28	21	..	21	18	..	18	29	..	29	29	..	29	332	0	332
12	..	12	13	..	13	10	..	10	15	..	15	8	..	8	11	..	11	11	..	11	133	0	133
7	..	7	4	..	4	5	..	5	2	..	2	2	..	2	5	..	5	5	..	5	54	0	54
..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	..	..	0	1	..	1	1	0	1
2	..	2	1	..	1	1	..	1	..	..	0	..	..	0	1	..	1	..	..	0	9	1	10
5	..	5	3	1	4	1	2	3	5	..	5	5	2	7	6	..	6	5	3	8	46	15	61
99	21	120	81	4	85	78	3	81	75	9	84	73	9	82	86	3	89	113	13	126	1047	113	1160

Table

Number of deaths among illegitimate infants, classified

Place of death	Miséricorde's foundling home and maternity hospital					St. Paul's foundling home					L'Aide à la Femme				
	0 to 2 mos.	3 mos. to 5 mos.	6 mos. to 11 mos.	Over 1 year	Total	0 to 2 mos.	3 mos. to 5 mos.	6 mos. to 11 mos.	Over 1 year	Total	0 to 2 mos.	3 mos. to 5 mos.	6 mos. to 11 mos.	Over 1 year	Total
Whooping-cough.....	..	..	..	..	0	..	..	..	..	0	..	..	..	..	0
Diphtheria.....	..	..	..	..	0	..	..	..	..	0	..	..	..	..	0
Tuberculosis.....	..	..	..	..	0	..	..	..	..	0	..	..	..	..	0
Syphilis.....	4	..	..	..	4	..	..	..	..	0	1	..	..	..	1
Influenza.....	..	..	..	..	0	..	..	..	..	0	..	..	..	..	0
Measles.....	..	..	..	..	0	..	..	..	..	0	..	..	..	..	0
Meningitis.....	..	..	..	..	0	..	..	..	..	0	..	..	..	..	0
Bronchitis.....	..	..	..	..	0	..	..	..	..	0	..	..	..	..	0
Broncho-pneumonia...	3	4	..	..	7	..	..	..	..	0	..	..	..	..	0
Pneumonia.....	1	..	..	..	1	..	..	..	..	0	..	..	..	..	0
Diarrhoea.....	10	2	2	..	14	..	..	..	..	0	..	..	..	..	0
Malformations.....	3	..	1	..	4	..	..	..	..	0	1	..	..	..	1
Congenital debility...	4	..	..	..	4	..	..	..	..	0	..	..	..	..	0
Premature birth.....	14	..	..	..	14	..	..	..	..	0	2	..	..	..	2
Other diseases of early infancy.....	7	..	..	..	7	..	..	..	..	0	1	..	..	..	1
Other causes.....	10	11	5	..	26	..	..	..	..	0	..	..	..	..	0
Total.....	56	17	8	0	81	0	0	0	0	0	5	0	0	0	5
Pourcentage.....	69.1	21.0	9.9	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0

XVI

according to cause, age and place of death — 1946

Protestant Institutions					Private boarding houses and maternities					Other places					Grand Total				
0 to 2 mos.	3 mos. to 5 mos.	6 mos. to 11 mos.	Over 1 year	Total	0 to 2 mos.	3 mos. to 5 mos.	6 mos. to 11 mos.	Over 1 year	Total	0 to 2 mos.	3 mos. to 5 mos.	6 mos. to 11 mos.	Over 1 year	Total	0 to 2 mos.	3 mos. to 5 mos.	6 mos. to 11 mos.	Over 1 year	Total
..	0	..	..	..	..	0	..	..	..	..	0	0	0	0	0	0
..	0	..	..	..	..	0	..	..	..	..	0	0	0	0	0	0
..	0	..	..	..	..	0	..	..	..	..	0	0	0	0	0	0
..	0	..	..	..	..	0	..	..	1	..	1	5	0	1	0	6
..	0	..	..	..	..	0	..	..	..	..	0	0	0	0	0	0
..	0	..	..	..	..	0	..	..	..	..	0	0	0	0	0	0
..	0	..	..	..	..	0	..	..	..	..	0	0	0	0	0	0
..	1	1	..	..	..	..	0	..	..	..	..	0	0	0	0	1	1
..	0	..	..	..	..	0	..	..	1	..	1	3	4	1	0	8
..	0	..	..	..	..	0	..	..	..	..	0	1	0	0	0	1
..	0	..	..	..	..	0	1	..	..	..	1	11	2	2	0	15
..	0	1	..	..	..	1	3	1	..	..	4	8	1	1	0	10
..	0	1	..	..	..	1	4	..	..	..	4	9	0	0	0	9
3	3	..	..	1	..	1	12	..	..	..	12	31	0	1	0	32
..	0	..	..	..	..	0	4	3	..	..	7	12	3	0	0	15
2	2	..	..	..	..	0	4	2	1	..	7	16	13	6	0	35
5	0	0	1	6	2	0	1	0	3	29	6	3	0	38	97	23	13	0	133
83.3	0.0	0.0	16.7	100.0	66.7	0.0	33.3	0.0	100.0	76.3	15.8	7.9	0.0	100.0	72.9	17.3	9.8	0.0	100.0

Table XVII

Number of deaths (excluding stillbirths) and rates per 1,000 population, classified according to race and sex—1946

(residents dying in and out of Montréal)

Nationalities	Sex		Total	Rate per 1,000 population
	M	F		
French Canadians.....	3,358	3,021	6,379	9.5
English Canadians.....	1,225	1,016	2,241	11.2
Jews.....	261	214	475	8.4
Other nationalities.....	471	201	672	8.5
Total.....	5,315	4,452	9,767	9.7

Table XVIII

Number of live births and deaths (excluding stillbirths) of infants under one year and rates per 1,000 live births, classified according to race—1946

(residents born and dying in and out of Montréal)

Nationalities	Births	Deaths	Rate per 1,000 births
French Canadians.....	17,451	942	54.0
English Canadians.....	3,616	137	37.9
Jews.....	1,101	32	29.1
Other nationalities.....	1,387	49	35.3
Total.....	23,555	1,160	49.2

Table XIX

Absolute infant mortality

Number of live births for the year 1945 and the number of infants of this group having died before reaching one year in 1945 and 1946 and number and percentage of the survivors at the beginning of 1947, classified for each month.

(residents born and dying in and out of Montréal)

Years and months	Live Births	Died in 1945	Died in 1946 before reaching age of one year												Total deaths under 1 year	Reached the first year alive		Living in January 1947		
			J.	F.	M.	A.	M.	J.	J.	A.	S.	O.	N.	D.		Total	No.		%	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(18)	(19)	(20)		
1945																				
January.....	1,861	125	2													2	127	1,734	93.18	1,792
February.....	1,666	94	1													1	95	1,571	94.30	1,696
March.....	1,983	121	1	1												3	124	1,859	93.75	1,959
April.....	1,932	116				3										4	120	1,812	93.79	1,961
May.....	1,865	89	2	2	1	1	1									7	96	1,769	94.85	2,048
June.....	1,905	95	4	1	3	1	3	1								13	108	1,797	94.33	1,976
July.....	1,882	126	2	2	3	3	2	2								8	134	1,748	92.88	2,019
August.....	1,790	86	4	2	2	3	2	3	1	1						15	101	1,689	94.36	1,875
September.....	1,805	87	9	2	2	3	1	3	1	1						20	107	1,698	94.07	1,805
October.....	1,779	92	5	3	6	1	1	7	1	1						24	116	1,663	93.48	1,790
November.....	1,712	63	3	2	5	3	1	5	1	1	1					22	85	1,627	95.04	1,743
December.....	1,895	62	13	10	16	4	2	4	1	1	4	2				57	119	1,776	93.72	1,907
Total.....	22,075	1,156	46	23	40	19	11	22	3	4	5	3	0	0	176	20,743	93.97			
1946																				
January.....	1,893		67	13	6	4	4	2	2		1	2		2	101					
February.....	1,764			41	6	4	3	5	1	2	2		1	4	68					
March.....	2,047				63	10	4	6	2	2	4	3	2		88					
April.....	2,056					64	12	8	2	2	5	2		3	95					
May.....	2,130						53	10	4	4	6	3	1	6	82					
June.....	2,074							67	9	6	4	7	3	9	98					
July.....	2,115								64	9	10	4	6	8	96					
August.....	1,957									54	47	13	5	10	75					
September.....	1,880											45	8	9	62					
October.....	1,852												62	21	83					
November.....	1,826													54	54					
December.....	1,961																			
Total.....	23,555		67	54	75	82	76	98	82	77	79	79	89	126	984				22,571	
Died in 1946...	.....	.....	113	77	115	101	87	120	85	81	84	82	89	126	1,160				

Table XX

Number of births and deaths of infants under one year and rate per 1,000 live births classified according to ward in 1946 (residents born and dying in and out of Montréal)

WARDS	Births	Deaths under 1 year	Rate 1,000 live births
Ahuntsic	552	23	41.67
Bourget	632	46	72.78
Crémazie	386	21	54.40
Delorimier	1,080	47	43.52
Hochelaga	653	46	70.44
Lafontaine	176	8	45.45
Laurier	448	26	58.04
Maisonneuve	921	37	40.17
Mercier	722	31	42.94
Montcalm	691	23	33.28
Mount Royal	735	22	29.93
Notre Dame de Grace	1,234	33	26.74
Papineau	475	27	56.84
Préfontaine	590	34	57.63
Rosemount	1,622	58	35.76
St. Andrew	436	7	16.06
St. Ann	388	17	43.81
Ste. Cunégonde	536	30	55.97
St. Denis	606	40	66.01
St. Edward	859	34	39.58
St. Eusèbe	606	41	67.66
St. Gabriel	527	31	58.82
St. George	234	4	17.09
St. Henry	806	44	54.59
St. James	583	37	63.46
St. John	723	26	35.96
St. Jean Baptiste	651	47	72.20
St. Joseph	293	16	54.61
St. Lawrence	427	21	49.18
St. Louis	406	23	56.65
St. Mary	404	22	54.46
St. Michael	514	38	73.93
St. Paul	828	31	37.44
Villemarie	900	86	95.56
Villeray	1,902	80	42.06
Unknown	9	3	333.33
Total	23,555	1,160	49.25

Table XXI
Number of deaths classified according to civil status, sex and race—1946
(residents dying in and out of Montréal)

Civil status	French- Canadians		British- Canadians		Jews		Other nationalities and unknown nationalities		Total		Grand total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Married.....	1,562	1,098	608	307	163	94	243	98	2,576	1,597	4,173
Single.....	517	516	230	197	27	16	96	22	870	751	1,621
Widowers and widows.....	604	912	244	412	36	88	80	64	964	1,476	2,440
Unknown	9	7	11	3	1	0	16	1	37	11	48
Children under 15 years.....	709	509	89	72	29	10	41	26	868	617	1,485
Total.....	3,401	3,042	1,182	991	256	208	476	211	5,315	4,452	9,767

Table

Number of deaths classified according to
(residents dying in

Causes of death	French-Canadians						British-Canadians					
	Under 1 year		1 to 4 years		Over 5 years		Under 1 year		1 to 4 years		Over 5 years	
	M	F	M	F	M	F	M	F	M	F	M	F
Typhoid and paratyphoid fevers	..	..	1	..	1	..	..	..	..	..	..	..
Scarlet fever.....	..	..	..	..	..	..	..	..	..	..	..	..
Whoopingcough.....	2	1	..	..	..	..	..	..	..	..	..	..
Diphtheria.....	1	..	4	6	4	4	..	..	1	..	..	2
Pulmonary tuberculosis.....	1	..	2	..	195	182	..	..	2	..	65	41
Tuberculosis, other forms.....	2	3	5	6	20	30	..	..	3	1	6	4
Syphilis.....	7	4	..	..	36	22	1	1	..	..	13	7
Influenza.....	8	6	4	6	23	25	..	1	..	..	15	23
Smallpox.....	..	..	..	..	..	..	..	..	..	..	..	..
Measles.....	1	1	4	3	..	..	1	..	..	..	..	..
Other infectious and parasitic diseases.....	8	1	4	4	19	10	..	1	..	..	8	2
Cancer.....	1	1	..	3	367	473	..	..	..	..	202	198
Diabetes.....	..	..	..	..	52	116	..	..	..	..	18	31
Other tumors and other general diseases.....	17	9	8	3	40	53	1	1	1	..	20	9
Diseases of the nervous system.	18	15	7	3	106	90	..	..	..	..	66	77
Diseases of the heart (90 to 95).	..	2	1	2	850	625	..	..	1	..	407	269
Other diseases of the circulatory system.....	..	..	..	..	52	45	..	..	..	..	30	28
Pneumonia (107 to 109).....	78	63	19	6	63	74	9	6	2	2	43	49
Other diseases of the respiratory system.....	2	2	5	..	28	14	..	..	..	..	11	8
Diarrhoea and enteritis (119, 120).....	33	27	7	2	12	8	6	4	..	1	2	5
Other diseases of the digestive system.....	7	1	4	7	153	134	..	..	..	..	40	43
Diseases of the genito-urinary system.....	1	..	1	..	479	529	..	..	..	..	106	92
Puerperal septicemia.....	..	..	..	..	..	6	..	..	..	..	..	2
Other diseases of pregnancy....	..	..	..	..	..	23	..	..	..	..	..	5
Diseases of the skin, cellular tissue and bones.....	2	1	..	..	6	2	2	..	..	..	3	2
Congenital malformation and early infancy diseases.....	353	261	4	4	6	1	57	46	1	3	..	1
Automobiles accidents.....	..	..	2	2	57	16	..	..	3	..	17	12
Violent and accidental deaths..	1	..	2	..	127	54	..	..	..	1	45	30
Ill-defined causes of deaths....	1	..	..	..	34	30	..	..	..	..	17	8
Total.....	544	398	84	57	2,730	2,566	77	60	14	8	1,134	948

XXII

cause, age group, sex and race—1946
(and out of Montréal)

Jews						Other nationalities or unknown						Total		
Under 1 year		1 to 4 years		Over 5 years		Under 1 year		1 to 4 years		Over 5 years		M	F	Grand total
M	F	M	F	M	F	M	F	M	F	M	F			
..	2	0	2
..	0	0	0
..	0	0	0
..	10	12	22
..	10	9	..	..	2	..	53	11	330	243	573
..	..	1	..	1	..	..	..	..	..	3	..	41	44	85
..	1	1	..	..	..	..	14	2	72	37	109
..	1	3	..	..	1	1	1	1	53	66	119
..	0	0	0
..	6	4	10
1	..	1	..	1	..	..	..	..	..	1	3	43	21	64
.	49	43	..	..	..	..	83	39	702	757	1,459
..	6	19	..	..	..	..	1	16	77	182	259
..	4	5	..	1	..	..	5	4	96	85	181
..	9	13	..	1	..	..	23	8	229	207	436
..	98	73	..	..	..	..	130	37	1,487	1,008	2,495
..	2	2	..	..	..	..	4	1	88	76	164
3	1	2	..	8	7	5	1	1	..	10	9	243	218	461
.	4	2	..	..	..	..	4	1	54	27	81
.	1	..	1	..	..	1	62	49	111
1	..	2	..	7	4	..	..	..	..	13	4	227	193	420
.	17	12	1	..	..	..	44	27	649	660	1,309
..	1	0	9	9
.	1	..	..	..	..	..	1	0	30	30
..	1	..	14	5	19
15	11	..	..	..	..	27	11	..	1	..	..	463	339	802
..	5	1	..	1	..	1	7	2	91	35	126
..	7	4	..	..	..	..	20	8	202	97	299
..	5	2	..	..	..	..	15	7	72	47	119
20	12	6	0	235	202	34	15	5	3	432	183	5,315	4,452	9,767

Number of non-resident deaths, dying in Montréal

Causes of death	French-Canadians						British-Canadians					
	Under 1 year		1 to 4 years		Over 5 years		Under 1 year		1 to 4 years		Over 5 years	
	M	F	M	F	M	F	M	F	M	F	M	F
Typhoid and paratyphoid fevers	..	..	..	..	..	2	..	..	..	..	..	..
Scarlet fever.....	..	..	..	..	..	..	..	..	..	..	..	..
Whooping cough.....	1	1	1	..	..	..	..	..	..	..	..	..
Diphtheria.....	1	..	3	..	3	6	..	..	..	..	..	..
Pulmonary tuberculosis.....	..	1	1	..	27	34	2	..	..	..	10	6
Tuberculosis, other forms.....	3	..	1	4	6	..	..	..	1	..	5	3
Syphilis.....	1	..	..	..	4	..	..	..	..	..	1	..
Influenza.....	1	..	1	..	2	1	..	..	..	..	..	..
Smallpox.....	..	..	..	..	..	..	..	..	..	..	..	..
Measles.....	..	..	..	1	..	..	..	..	..	..	..	..
Other infectious and parasitic diseases.....	5	..	4	..	21	10	..	..	1	..	8	3
Cancer.....	..	..	1	2	78	48	..	..	2	1	65	36
Diabetes.....	..	..	1	..	12	13	..	..	..	..	8	7
Other tumors and other general diseases.....	1	..	4	..	7	11	1	..	..	..	5	6
Diseases of the nervous system.	2	4	1	2	21	15	..	..	1	..	5	9
Diseases of the heart (90 to 95).	..	..	..	1	73	59	..	..	1	..	74	37
Other diseases of the circulatory system.....	..	..	..	..	7	6	..	..	..	..	7	5
Pneumonia.....	16	10	5	..	6	3	4	6	..	..	8	8
Other diseases of the respiratory system.....	2	..	1	..	3	2	..	..	..	..	2	1
Diarrhoea and enteritis (119, 120).....	10	2	1	1	..	1	..	..	..	..	2	..
Other diseases of the digestive system.....	1	..	5	1	37	21	1	1	1	..	18	16
Diseases of the genito-urinary system.....	1	..	1	..	56	34	..	..	..	..	24	10
Puerperal septicemia.....	..	..	..	..	..	3	..	..	..	..	..	1
Other diseases of pregnancy....	..	..	..	..	..	3	..	..	..	..	..	2
Diseases of the skin, cellular tissue and bones.....	1	..	..	..	1	1	..	..	..	..	..	..
Congenital malformations and early infancy diseases.....	53	49	2	1	1	..	28	25	1	1	1	..
Automobile accidents.....	..	..	2	..	19	3	..	..	..	..	5	1
Violent and accidental deaths..	2	..	3	1	27	12	..	..	1	1	15	6
Ill-defined causes of deaths....	1	..	..	..	5	2	..	..	1	..	8	1
Total.....	102	67	38	14	416	301	36	32	10	3	271	158

XIII

istributed by cause, age group, sex and race—1946

Jews						Other nationalities or unknown						Total		
Under 1 year		1 to 4 years		Over 5 years		Under 1 year		1 to 4 years		Over 5 years		M	F	Grand total
M	F	M	F	M	F	M	F	M	F	M	F			
..	0	2	2
..	0	0	0
..	1	..	1	..	..	2	3	5
..	7	6	13
..	1	..	..	..	..	..	3	1	44	42	86
..	2	..	..	..	..	1	..	17	20	37
..	..	1	..	..	..	..	..	..	..	..	..	7	0	7
..	4	1	5
..	0	0	0
..	0	1	1
..	1	..	..	..	..	..	..	..	..	..	2	39	16	55
..	7	6	..	..	..	..	10	3	163	96	259
..	2	3	..	..	..	..	..	..	23	23	46
..	1	..	..	..	..	..	..	..	19	17	36
..	2	1	..	..	..	3	2	34	34	68
..	10	10	..	..	..	..	10	5	168	112	280
..	1	..	15	11	26
..	2	..	2	..	..	..	1	1	44	28	72
..	1	1	..	..	..	..	1	1	10	5	15
..	1	..	..	..	..	..	..	13	5	18
..	1	..	..	..	..	..	..	..	..	4	1	67	41	108
..	4	1	..	..	..	..	2	1	88	46	134
..	0	4	4
..	0	5	5
..	2	1	3
2	3	..	..	..	..	4	1	..	..	..	..	92	80	172
..	1	..	27	4	31
..	1	..	..	1	..	1	1	50	22	72
..	2	..	..	..	..	1	1	16	1	22
2	5	1	0	28	29	7	2	1	1	39	19	951	631	1,582

Ta
Deaths by ward and
(residents dying in an

WARDS	Typhoid fever...1-2	Scarlet fever.....8	Whooping cough...9	Diphtheria.....10	Tuberculosis pulmonary.....13	Tuberculosis other forms..14-22	Syphilis.....30	Influenza.....33	Measles.....35	Other contagious diseases.....1-44
	1	2	3	4	5	6	7	8	9	10
1— Ahuntsic.....	18	2	2	1	2	33
2— Bourget.....	15	...	...	...	3	40
3— Crémazie.....	31	3	2	...	8	24
4— Delorimier.....	26	7	...	1	9	84
5— Hochelaga.....	29	2	3	1	4	28
6— Lafontaine.....	7	3	1	...	...	16
7— Laurier.....	1	2	5	...	4	1	1	29
8— Maisonneuve.....	1	19	1	1	1	10	47
9— Mercier.....	12	1	1	...	4	35
10— Montcalm.....	1	1	14	3	1	...	5	32
11— Mount Royal.....	9	2	2	...	5	32
12— Notre Dame de Grâce.....	20	2	14	...	4	106
13— Papineau.....	2	17	2	3	...	4	23
14— Préfontaine.....	1	...	...	2	10	2	6	...	3	34
15— Rosemount.....	27	3	2	...	8	77
16— St. Andrew.....	18	2	4	...	4	74
17— St. Ann.....	13	3	4	...	1	18
18— Ste. Cunégonde.....	21	1	4	...	4	34
19— St. Denis.....	1	...	...	1	9	5	2	...	5	41
20— St. Edward.....	22	7	9	...	5	45
21— St. Eusèbe.....	8	1	1	...	7	28
22— St. Gabriel.....	9	1	4	...	4	33
23— St. George.....	7	...	1	...	1	43
24— St. Henry.....	1	20	4	2	...	6	37
25— St. James.....	24	3	5	1	5	48
26— St. John.....	1	11	2	3	...	7	40
27— St. Jean Baptiste.....	6	21	4	8	1	4	39
28— St. Joseph.....	10	3	4	...	3	24
29— St. Lawrence.....	33	2	4	...	12	55
30— St. Louis.....	1	2	8	1	2	...	2	30
31— St. Mary.....	11	1	3	1	4	27
32— St. Michael.....	17	2	8	...	3	62
33— St. Paul.....	2	12	5	1	...	6	33
34— Villemarie.....	9	1	3	...	8	30
35— Villeray.....	1	31	4	3	2	11	77
36— Unknown.....	2	...	...	1
Total.....	2	...	3	22	573	85	119	10	172	1,459

XXIV

by cause—1946
out of Montréal)

Cancer.....45-55	Diabetes.....61	Vascular diseases.....83	Heart diseases..90-95	Pneumonias..107-109	Enteritis....119-120a	Nephritis....130-132	Maternal mortality..140-150	Diseases of early infancy...157-161	Accidents....169-198	Other violent deaths.....163-168	Others diseases.....45-200	Total
11	12	13	14	15	16	17	18	19	20	21	22	23
6	7	16	40	6	4	29	...	16	6	2	17	207
6	2	16	63	10	6	42	2	33	9	1	23	271
4	4	19	68	7	4	32	...	16	17	4	23	266
12	12	29	85	16	7	71	1	38	12	2	39	451
2	2	10	47	17	1	33	1	33	10	3	27	248
5	3	8	22	13	1	15	...	5	2	1	8	110
5	6	16	35	16	1	22	...	13	9	1	24	191
12	8	16	71	15	4	46	1	27	10	3	38	331
2	14	9	39	8	...	31	...	25	5	1	27	214
7	9	8	29	6	2	18	...	17	6	2	24	185
14	14	25	41	10	1	12	...	20	9	3	18	217
19	44	75	112	24	...	38	...	28	22	4	71	583
9	1	16	42	18	2	34	3	15	8	1	18	218
3	4	10	31	8	4	22	2	24	12	3	20	201
15	12	27	62	20	2	51	5	42	27	3	56	439
9	21	39	96	20	1	44	...	7	16	4	53	402
4	6	12	38	9	3	21	...	8	12	2	30	184
4	4	9	39	13	2	36	1	21	12	2	31	249
7	2	15	52	10	3	52	1	31	10	1	35	283
13	8	20	72	7	2	64	5	30	14	2	44	369
4	5	11	37	14	1	25	2	29	4	1	22	200
4	10	17	48	15	.	21	2	25	6	4	16	219
4	11	26	36	9	.	23	...	4	17	1	30	213
7	4	12	61	15	3	48	3	27	9	2	46	307
5	11	14	57	16	7	50	2	23	25	2	39	337
7	4	18	44	10	1	30	1	21	14	...	19	233
16	13	18	91	11	5	41	3	34	17	3	38	373
3	4	12	36	5	4	19	...	9	12	1	21	170
3	8	16	61	22	...	44	...	14	11	8	40	333
4	8	18	58	11	2	13	1	16	11	6	24	218
8	...	9	41	9	1	29	...	13	8	...	27	192
9	13	26	56	11	4	24	...	26	13	1	31	306
9	10	9	32	15	3	20	1	20	4	2	30	214
6	6	7	42	16	11	32	...	35	16	3	40	266
11	17	31	87	26	3	78	2	62	23	2	76	546
1	1	1	7	3	1	2	...	3	2	...	8	32
259	308	630	1,878	461	96	1,212	39	810	420	81	1,128	9,767

Table

Number of deaths classified according to
(residents dying in an

WARDS	0 to 1 year		1 year to 4 years		5 years to 14 years		15 to 49 years								50			
							Married		Widowed		Single		Unknown		Married		Widowed	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Ahuntsic.....	18	5	4	1	1	0	8	6	0	0	11	10	0	0	28	18	5	
Bourget.....	24	22	1	1	1	0	15	11	1	0	8	5	0	0	35	26	10	
Crémazie.....	14	7	3	0	1	4	18	13	2	3	17	15	0	1	40	18	10	1
Delorimier.....	27	20	5	5	2	4	28	19	3	1	14	17	0	0	74	42	11	1
Hochelaga.....	23	23	1	1	5	1	20	15	0	2	11	10	0	0	35	14	3	1
Lafontaine.....	3	5	0	0	0	0	6	8	1	0	1	7	0	0	20	6	2	
Laurier.....	15	11	6	0	2	1	6	8	0	0	7	6	0	0	29	16	7	
Maisonneuve.....	18	19	7	3	0	1	16	14	2	2	21	13	0	0	50	24	10	1
Mercier.....	18	13	3	1	1	0	18	14	1	1	7	7	0	0	35	10	7	
Montcalm.....	11	12	5	3	0	0	11	16	1	2	7	5	0	2	27	20	5	
Mount Royal.....	13	9	3	1	2	0	14	10	0	1	7	7	0	0	36	12	4	
N.D. de Grâce.....	18	15	3	1	2	1	26	28	0	1	10	17	1	0	105	50	14	3
Papineau.....	16	11	3	4	4	2	14	9	1	1	7	4	1	0	22	15	8	
Préfontaine.....	18	16	5	1	4	0	14	10	1	0	10	8	0	0	27	15	2	
Rosemont.....	39	19	3	6	4	5	27	28	1	2	21	15	1	0	67	44	7	1
St. Andrew.....	6	1	1	2	2	1	14	10	0	0	11	15	0	1	45	21	11	1
St. Ann.....	8	9	2	1	1	2	15	14	2	0	11	4	0	1	20	13	7	
Ste. Cunégonde....	17	13	3	0	1	2	9	12	0	1	14	12	0	0	38	20	8	
St. Denis.....	20	20	4	1	3	1	18	13	3	1	5	8	0	0	34	23	13	
St. Edward.....	14	20	1	7	2	2	16	25	1	0	20	12	0	0	54	42	13	1
St. Eusèbe.....	27	14	3	1	2	1	8	10	1	1	3	6	0	0	25	23	11	
St. Gabriel.....	19	12	1	1	1	1	10	7	1	1	6	0	0	0	32	19	4	1
St. George.....	2	2	3	1	0	0	9	5	0	0	9	6	1	0	26	8	10	1
St. Henry.....	36	8	4	4	4	1	13	19	2	0	20	8	0	1	42	35	8	
St. James.....	23	14	6	2	2	0	26	23	2	3	15	8	1	1	32	20	9	1
St. John.....	16	10	1	1	2	6	18	13	1	3	10	2	0	0	45	15	5	
St. Jean Baptiste...	32	15	3	7	4	3	13	24	0	1	14	10	0	0	56	22	4	2
St. Joseph.....	9	7	5	2	2	1	5	4	0	2	10	3	0	2	25	8	10	
St. Lawrence.....	7	14	4	0	1	2	19	10	0	2	27	12	0	1	62	14	19	
St. Louis.....	13	10	1	1	0	0	14	9	0	1	6	8	0	0	32	15	10	
St. Mary.....	11	11	3	0	3	2	6	13	2	0	9	5	0	0	13	15	7	
St. Michael.....	19	19	2	4	4	3	12	8	1	0	16	5	0	0	52	35	9	
St. Paul.....	16	15	2	0	2	3	12	10	0	1	7	8	0	0	32	16	9	
Villemarie.....	53	33	1	1	1	3	9	4	0	0	7	6	1	0	19	7	9	
Villeray.....	52	28	7	4	6	2	31	28	0	2	17	19	0	0	80	55	5	2
Unknown.....	0	3	0	0	0	0	1	1	0	0	1	0	0	0	3	2	2	
Total.....	675	485	109	68	72	55	519	471	30	35	397	304	6	10	1397	758	288	35

XXV

ward, age group and civil status—1946

out of Montréal)

9 years				70 years and over								Total								Grand total
Single		Unknown		Married		Widowed		Single		Unknown		Married		Widowed		Single		Unknown		
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
8	4	2	0	14	4	19	20	5	10	0	0	50	28	24	26	24	24	2	0	207
8	4	1	0	26	14	19	28	1	6	1	0	76	51	30	31	17	15	2	0	271
30	5	4	1	10	4	13	6	7	5	5	0	68	35	25	19	54	25	9	2	266
10	8	1	0	41	23	18	54	5	5	1	1	143	84	32	67	29	30	2	1	451
3	2	1	0	15	9	12	26	3	2	0	1	70	38	15	38	17	14	1	1	248
2	2	0	0	5	6	7	15	1	10	0	0	31	20	10	18	4	19	0	0	110
5	5	1	1	19	8	13	20	1	1	1	0	54	32	20	22	13	12	2	1	191
10	5	0	1	22	11	21	36	1	6	0	0	88	49	33	56	32	24	0	1	331
6	3	0	0	9	8	15	25	2	5	0	0	62	32	23	31	15	15	0	0	214
0	5	0	1	8	10	12	15	0	1	0	0	46	46	18	23	7	11	0	3	185
4	8	0	1	23	10	5	32	4	4	0	0	73	32	9	40	15	19	0	1	217
11	11	1	1	59	22	42	99	3	11	0	1	190	100	56	130	24	39	2	2	583
9	1	0	1	14	8	17	21	3	13	1	0	50	32	26	30	19	18	2	1	218
2	1	0	1	27	8	10	11	1	2	0	0	68	33	13	18	13	11	0	1	201
5	4	0	0	23	26	30	29	4	8	1	1	117	98	38	50	30	27	2	1	439
17	37	2	0	28	7	37	51	13	54	1	1	87	38	48	64	41	106	3	2	402
16	0	1	0	14	6	9	12	5	5	1	0	49	33	18	17	32	9	2	1	184
6	3	0	1	12	9	16	30	3	2	1	0	59	41	24	36	23	17	1	1	238
5	7	1	0	20	11	11	45	2	5	0	0	72	47	27	55	12	20	1	0	283
5	4	1	0	24	17	18	44	4	8	0	0	94	84	32	59	29	24	1	0	369
4	1	0	1	9	8	9	21	3	0	0	1	42	41	21	29	10	7	0	2	200
7	5	0	0	15	8	23	30	0	4	0	0	57	34	28	43	13	9	0	0	219
19	9	5	0	11	6	21	22	12	16	0	0	46	19	31	32	40	31	6	0	213
6	2	0	0	12	12	25	30	1	6	0	1	67	66	35	37	27	16	0	2	307
12	6	2	1	23	10	22	40	7	11	1	0	81	53	33	58	34	25	4	2	337
3	1	1	0	14	11	16	28	0	2	0	0	77	39	22	40	13	5	1	0	233
12	6	1	1	31	17	18	39	7	7	0	0	100	63	22	66	33	23	1	1	373
10	2	4	0	7	3	11	24	6	1	1	0	37	15	21	34	26	4	5	2	170
22	11	11	0	17	6	14	19	14	12	4	0	98	30	33	30	63	35	15	1	333
6	2	2	0	15	12	19	28	1	6	0	0	61	36	29	36	13	16	2	0	218
3	4	0	0	16	2	15	31	1	12	0	0	35	30	24	39	13	21	0	0	192
5	6	1	0	26	9	9	42	4	6	0	0	90	52	19	51	25	17	1	0	306
4	3	0	0	17	14	13	22	2	3	0	0	61	40	22	26	13	14	5	0	214
29	3	1	0	11	2	12	17	23	6	3	0	39	13	21	22	59	15	5	0	266
9	8	1	0	44	29	28	50	1	11	0	0	155	112	33	81	27	38	1	0	546
4	1	1	0	1	1	4	1	2	3	0	0	5	4	6	1	7	5	1	0	32
317	189	46	12	682	371	603	1063	152	267	22	7	2598	1600	921	1455	866	760	74	29	9,767

Number and rates per 100,000 population of deaths caused by
and per year for
(residents dying in

Periods of years	Typhoid and Paratyphoid		Smallpox		Measles		Whooping cough		Scarlet fever	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1875-1879.....	86	67.5	584	458.4	27	21.2	42	33.0	65	51.0
1880-1884.....	94	63.0	29	19.4	32	21.4	37	24.8	39	26.1
1885-1889.....	85	45.6	647	347.2	74	39.7	48	25.8	20	10.7
1890-1894.....	53	24.0	0	0.0	48	21.7	61	27.6	146	66.0
1895-1899.....	53	21.4	3	1.2	38	15.4	80	32.4	38	15.4
1900-1904.....	105	36.1	5	1.7	65	22.4	89	30.6	104	35.8
1905-1909.....	129	33.3	0	0.0	71	18.3	76	19.6	45	11.6
1910-1914.....	121	25.1	1	0.2	78	16.2	102	21.2	107	22.2
1915-1919.....	101	18.1	1	0.2	72	12.9	114	20.4	47	8.4
1920-1924.....	58	9.1	0	0.0	43	6.7	94	14.7	82	12.8
1925-1929.....	141	19.1	0	0.0	45	6.1	91	12.3	50	6.8
1930-1934.....	32	3.9	0	0.0	27	3.3	72	8.7	30	3.6
1935-1939.....	15	1.7	0	0.0	49	5.6	59	6.8	22	2.5
1940-1944.....	11	1.2	0	0.0	13	1.4	34	3.6	4	0.4
1945.....	14	1.4	0	0.0	2	0.2	30	3.0	1	0.1
1946.....	2	0.2	0	0.0	10	1.0	3	0.3	0	0.0

(1) From 1875-1903, the total deaths per pulmonary tuberculosis includes the deaths per other forms of tuberculosis.

(2) All deaths per diarrhoea and enteritis are included in this heading. (119-120a.)

XVI

y certain diseases, by five-year period from 1875-1944

045 and 1946

nd out of Montréal)

Diphtheria		Tuberculosis				Cancer		Diarrhœa (2)		Chronic nephritis	
		Pulmonary (1)		Other forms							
No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
237	186.0	416	326.5	...	...	45	35.3	517	405.8	...	...
272	182.3	435	291.6	...	...	57	38.2	569	381.4	...	...
478	256.5	491	263.5	...	...	85	45.6	734	393.6	...	...
165	74.6	545	246.3	...	...	99	44.7	871	393.6	...	...
270	109.2	643	260.0	...	...	156	63.1	754	304.9	...	...
104	35.8	644	221.5	222	69.8	177	60.9	1,073	369.1	118	37.1
106	27.3	641	165.2	183	47.2	222	57.2	1,705	439.6	231	59.6
144	29.9	853	177.0	181	37.5	322	66.8	2,125	440.8	382	79.2
172	30.8	904	161.9	208	37.3	407	72.9	1,709	306.1	484	86.7
157	24.6	807	126.2	178	27.8	502	78.5	1,451	226.9	590	92.3
146	19.8	798	108.1	148	20.0	641	86.8	973	131.8	713	96.5
51	6.2	713	86.4	133	16.1	855	103.7	697	84.5	760	92.2
22	2.5	583	67.1	101	11.6	1,091	125.5	266	30.6	979	112.6
24	2.6	569	61.2	87	9.4	1,269	136.6	184	19.8	1,131	121.7
23	2.3	535	54.2	78	7.9	1,342	136.1	187	19.0	1,181	119.8
22	2.2	573	56.9	85	8.4	1,459	144.9	107	10.6	1,172	116.4

Table XXVII

Deaths by certain contagious and diarrheal diseases classified according to month—1946
(residents dying in and out of Montréal)

Causes of deaths	January	February	March	April	May	June	July	August	September	October	November	December	Total
Typhoid fever.....	.. 1	.. 2	1 1	.. 1	.. 1	.. 2	.. 1	1	..	.. 1	.. 1	..	2
Cerebral spinal meningitis.....	.. 1	.. 2	1 1	.. 1	.. 1	.. 2	.. 1	..	..	.. 1	.. 1	..	11
Scarlet fever.....	.. 2	..	..	..	..	..	..	..	..	.. 1	..	..	0
Whooping cough.....	.. 1	.. 2	..	.. 2	.. 1	.. 1	.. 1	.. 1	.. 2	.. 3	.. 4	.. 4	3
Diphtheria.....	.. 1	..	..	..	.. 1	..	..	..	..	.. 3	.. 4	..	22
Erysipelas.....	.. 1	..	..	..	.. 1	..	..	..	..	..	..	..	2
Pulmonary tuberculosis.....	48	47	49	45	56	55	54	42	37	41	46	53	573
Tuberculosis, other forms.....	9	7	3	13	9	7	8	4	5	10	4	6	85
Influenza.....	53	18	13	11	8	6	1	..	1	3	3	2	119
Smallpox.....	..	.. 1	.. 3	.. 3	.. 2	..	..	.. 1	..	..	..	..	0
Measles.....	..	..	..	.. 3	..	.. 1	.. 5	7	7	.. 4	.. 1	..	10
Poliomyelitis.....	..	..	..	..	..	..	..	..	..	..	..	..	25
German measles.....	.. 1	..	..	..	..	..	..	..	..	..	..	..	0
Varicella.....	.. 1	..	..	..	..	..	..	..	..	..	..	..	1
Mumps.....	.. 14	.. 18	.. 8	.. 10	.. 15	.. 16	.. 5	.. 9	.. 11	.. 8	.. 4	.. 16	0
Other contagious diseases.....	..	..	..	..	..	..	..	..	..	..	..	..	134
Total.....	130	95	78	85	93	88	75	65	63	71	63	81	987
Diarrhea and enteritis.....	2	2	7	5	2	7	4	10	12	4	5	7	67
Grand total.....	132	97	85	90	95	95	79	75	75	75	68	88	1,054

Table XXVIII

Deaths by certain diseases and groups of diseases, and rates
per 1,000 population for the years 1944, 1945 and 1946
(residents dying in and out of Montréal)

Causes	Years			Rate per 1,000 population		
	1944	1945	1946	1944	1945	1946
I—Epidemic diseases:						
Typhoid	10	14	2	0.01	0.02	0.00
Diphtheria	27	23	22	0.03	0.02	0.02
Influenza	66	64	119	0.07	0.07	0.12
Tuberculosis (pulmonary)	523	535	573	0.54	0.54	0.57
Other infectious diseases	294	250	271	0.30	0.25	0.27
Total	920	886	987	0.95	0.90	0.98
II to V—General diseases:						
Cancer	1,323	1,342	1,459	1.36	1.36	1.45
Other general diseases	499	434	440	0.51	0.44	0.44
Total	1,822	1,776	1,889	1.87	1.80	1.89
VI—Diseases of nervous system	532	528	436	0.55	0.53	0.43
VII—Diseases of circulatory system	2,564	2,480	2,659	2.64	2.51	2.64
VIII—Diseases of respiratory system	562	588	542	0.58	0.60	0.54
IX—Diseases of the digestive system:						
Diarrhœa, 0 to 2 years	215	164	80	0.22	0.16	0.08
Other dis. of the digestive sys.	450	421	451	0.46	0.43	0.45
Total	665	585	531	0.68	0.59	0.53
X—Diseases of genito-urinary system	1,346	1,266	1,309	1.38	1.28	1.30
XI—Diseases of pregnancy, childbirth and the puerperal state	69	46	39	0.07	0.05	0.04
XII—Diseases of the skin	28	8	12	0.03	0.01	0.01
XIII—Diseases of the bones	13	5	7	0.01	0.01	0.01
XIV—Congenital malformations	172	213	236	0.18	0.22	0.23
XV—Diseases of early infancy:						
Debility, etc. (158-160-161)	293	256	234	0.30	0.26	0.23
Premature birth (159)	404	363	332	0.42	0.37	0.33
Total	697	619	566	0.72	0.63	0.56
XVI—Senility	37	19	25	0.04	0.02	0.02
XVII—Violent or accidental deaths:						
Suicides	33	39	70	0.03	0.04	0.07
Homicides	12	26	15	0.01	0.03	0.02
Other violent deaths	409	380	425	0.42	0.38	0.42
Total	454	445	510	0.46	0.45	0.51
XVIII—Cause of death not determined	27	17	9	0.03	0.02	0.01
Grand total	9,908	9,481	9,767	10.19	9.62	9.70

Table XXIX
Population and deaths by cause for each racial group—1946
(residents dying in and out of Montréal)

	670,778	200,381	56,759	79,082	1,007,000
Population.....					
Proportion.....	66.61	19.90	5.64	7.85	100.00
Causes of death	French- Canadians	English- Canadians	Jews	Other nationalities or unknown	Total
Typhoid.....	2	0	0	0	2
Scarlet fever.....	0	0	0	0	0
Whooping cough.....	3	0	0	0	3
Diphtheria.....	19	3	0	0	22
Tuberculosis, pulmonary.....	380	108	19	66	573
Tuberculosis, other forms.....	66	14	2	3	85
Influenza.....	72	39	4	4	119
Measles.....	9	1	0	0	10
Other contagious diseases.....	115	33	5	20	173
Cancer.....	845	400	92	122	1,459
Diabetes.....	168	49	25	17	259
Intracranial lesions of vascular origin.....	139	123	22	24	308
Diseases of the heart.....	1,480	677	171	167	2,495
Pneumonia.....	303	111	21	26	461
Diarrhea and enteritis.....	89	18	1	3	111
Nephritis.....	948	175	25	64	1,212
Diseases of early infancy.....	629	108	26	39	802
Violent deaths and accidental.....	304	122	24	60	510
Total.....	5,571	1,981	437	615	8,604
Other causes of death.....	808	260	38	57	1,163
Grand total.....	6,379	2,241	475	672	9,767

Table XXX

Mean number of deaths, births and marriages and rates per 1,000 population by period of five years from 1872-1944, with the exception of a period of three years from 1872-1874, and for each year 1945 and 1946

Years	Population	Deaths	Rate per 1,000 pop.	Births	Rate per 1,000 pop.	Marriages	Rate per 1,000 pop.
Average from:							
1872 to 1874.....	113,967	4,249	37.3	0	0	0	0
1875 to 1879.....	127,400	4,285	33.6	6,462	50.7	1,310	10.3
1880 to 1884.....	149,170	3,952	26.5	6,728	45.1	1,513	10.1
1885 to 1889.....	186,340	5,836	31.3	8,043	43.2	1,944	10.4
1890 to 1894.....	221,290	5,728	25.9	9,699	43.8	2,159	9.8
1895 to 1899.....	247,300	6,066	24.5	9,584	38.8	2,051	8.3
1900 to 1904.....	290,746	6,878	23.6	10,074	34.6	2,630	9.0
1905 to 1909.....	387,880	8,144	21.0	13,296	34.3	3,616	9.3
1910 to 1914.....	482,037	10,330	21.4	19,047	39.5	5,370	11.1
1915 to 1919.....	558,280	11,090	19.9	20,089	36.0	5,258	9.4
1920 to 1924.....	639,481	10,305	16.1	21,013	32.9	6,175	9.6
1925 to 1929.....	738,500	10,153	13.7	20,907	28.3	6,542	8.8
1930 to 1934.....	824,695	9,560	11.6	19,711	23.9	6,224	7.5
1935 to 1939.....	869,220	9,230	10.6	17,089	19.7	8,446	9.7
1940 to 1944.....	929,241	9,726	10.5	20,199	21.7	11,149	12.0
1945.....	986,000	9,481	9.6	22,075	22.4	10,470	10.6
1946.....	1,007,000	9,767	9.7	23,555	23.4	11,669	11.6

Classification of deaths according to the International L

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		1 t 1 ye
						M	F	M	F	M	F	M	F	
		I.—Infective and Parasitic Diseases.												
1	1	DUE TO BACTERIA: Typhoid fever (Abdominal typhus).....												
2	2	Paratyphoid fevers (Paratyphus).....	2	2				1						1
14	3	Plague												
		a) Bubonic, septicaemic and secondary pulmonary plague.....												
		b) Primary pneumonic plague.....												
		c) Unspecified plague.....												
12	4	Cholera.....												
5	5	Undulant fever (Brucellosis)												
		a) Infection by Brucella melitensis (Melitococcus)....	1	1										
		b) Infection by Brucella Abortus Bang.....												
		c) Unspecified.....												
18	6	Cerebrospinal meningococcal meningitis.....	11	8	3	5	1	2	1	1				
20	7	Malignant pustule and anthrax (Bacillus anthracis)												
		a) Malignant pustule.....	1	1										
		b) Septicaemic and visceral anthrax.....												
		c) Unspecified anthrax.....												
8	8	Scarlet fever.....												
9	9	Whooping-cough.....	3	2	1	2	1							
10	10	Diphtheria.....	22	10	12	1		5	6	4	6			
15	11	Erysipelas.....	2	2										
22	12	Tetanus.....												
23	13	Tuberculosis of the respiratory system.												
		a) With mention of occupational disease of lung....	2	1	1							1		
		b) Without mention of occupational disease of lung..	571	329	242	1		6		2			4	133
		c) Tuberculosis of unspecified site.....												
24	14	Tuberculosis of the meninges and central nervous system												
		a) Meninges.....	22	15	7	1	1	5	3	1	1	1	1	33
		b) Other sites.....												
25	15	Tuberculosis of the intestines and peritoneum (including mesenteric and retroperitoneal glands)												
		a) Intestines.....	10	4	6			1						
		b) Other sites.....	2	1	1									
26	16	Tuberculosis of the vertebral column.....	5	4	1									
27	17	Tuberculosis of the bones and joints (excluding vertebral column)												
		a) Bones (except vertebral column).....	4		4									
		b) Joints.....	1	1										1
28	18	Tuberculosis of the skin and subcutaneous cellular tissue.....												
		Carried over.....	659	381	278	10	3	20	10	8	7	2	5	183

XXI

f Causes of deaths by sex and age group—year 1946

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
																										1
																										2
																										3
																										a)
																										b)
																										c)
																										4
																										5
								1																		a)
																										b)
																										c)
	1																									6
																										7
																		1								a)
																										b)
																										c)
																										8
																										9
																										10
																		2								11
																										12
																										13
									1																	a)
24	37	26	41	25	27	22	27	45	9	48	18	21	19	41	11	19	9	16	8	19	9	1	2			b)
																										c)
																										14
2				1	1					1																a)
																										b)
																										15
	1						1		1			2		1	1		1		1							a)
					1											1										b)
1	1	1				1				1																16
																										17
	1								1						1		1									a)
																										b)
																										18
27	41	27	42	26	28	23	28	46	12	50	18	23	19	42	13	20	11	19	9	19	9	1	2	0	0	

Classification of deaths according to the International List

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years
						M	F	M	F	M	F	M	F	
		Carried	659	381	278	10	3	20	10	8	7	2	5	18
29	19	Tuberculosis of lymphatic system (excluding mediastinal mes- enteric, retroperitoneal glands).	1	1										
30	20	Tuberculosis of the genito-uri- nary system	7	4	3					1			1	2
31	21	Tuberculosis of other organs												
		a) Addison's disease specified as tuberculosis												
		b) Others												
32	22	Disseminated tuberculosis												
		a) Acute generalized miliary tuberculosis	33	10	23	2	2	1	5	2	5	1		1
		b) Chronic gen. tuberculosis												
		c) Unspecified	1	1										1
33	23	Leprosy												
36	24	Purulent infection and septi- caemia (non puerperal)												
		a) Septicaemia	2	1	1	1								
		b) Pyaemia	1	1										
		c) Gas gangrene	1	1										
		d) Generalized infection by Bacillus coli												
35	25	Gonococcal infections (all sites)												
nil	26	Other bacterial diseases												
		a) Glanders												
		b) Tularaemia	1	1										
		c) Others												
13	27	Dysentery												
		a) Bacillary dysentery	1		1		1							
		b) Amoebic dysentery												
		c) Other protozoal dysentery												
		d) Other or unspecified forms of dysentery												
38	28	DUE TO PROTOZOA:												
		Malaria												
39	29	Other diseases due to parasitic protozoa (except spirochaetes)												
34	30	DUE TO SPIROCHAETES:												
		Syphilis												
		a) Locomotor ataxia (tabes dorsalis)	5	1	4									
		b) General paralysis of the insane	31	21	10									
		c) Aneurysm of the aorta	28	19	9									1
		d) Other forms of syphilis												
		da) Congenital syphilis	13	8	5	8	5							
		db) Syphilis of nervous system (except tabes and general paralysis of the insane)	9	9				1						
		dc) Syphilis of the circu- latory system (except aneurysm of the aorta)	17	10	7									
		dd) Other or unspecified forms of syphilis	6	5	1									
4	31	Relapsing fever												
nil	32	Other diseases (spirochaetes)												
		a) Spirochaetosis ictero-hae- morrhagica (Weil's dis.)												
		b) Others												
		Carried Over	816	474	342	21	11	22	15	11	12	3	6	23

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
27	41	27	42	26	28	23	28	46	12	50	18	23	19	42	13	20	11	19	9	19	9	1	2	0	0	
1	19
...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20
...	21
...	a)
...	b)
...	4	1	2	...	1	1	1	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	22
...	a)
...	b)
...	c)
...	23
...	1	...	...	...	...	...	...	...	...	...	...	...	...	24
...	1	...	...	...	...	...	...	...	...	...	a)
...	1	...	...	...	...	...	b)
...	c)
...	d)
...	25
...	26
...	1	...	...	...	...	...	...	...	...	...	...	...	a)
...	b)
...	c)
...	27
...	a)
...	b)
...	c)
...	d)
...	28
...	29
...	30
...	1	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	1	...	...	...	a)
...	3	...	1	1	2	4	2	1	2	...	3	2	3	...	3	...	2	2	...	...	...	...	b)
...	2	1	1	...	5	2	1	1	3	1	4	2	1	2	...	...	...	...	c)
...	da)
...	1	...	...	...	1	...	1	...	1	...	1	...	2	...	1	...	...	...	db)
...	2	1	1	...	...	2	...	1	1	1	1	2	1	2	...	1	1	...	...	...	...	dc)
...	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...	2	1	...	...	...	...	dd)
...	31
...	32
...	a)
...	b)
28	46	28	44	29	32	27	32	54	17	55	19	32	24	49	17	30	15	31	11	28	15	3	3	0	0	

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		Carried.....	816	474	342	21	11	22	15	11	12	3	6	23	2
11	33	DUE TO VIRUSES: Influenza													
		a) With respiratory compli-													
		cations specified.....	84	35	49	5	6	1	4	2	...	1	...	2	...
		b) Without respiratory com-													
		plications specified.....	35	18	17	3	1	4	3	...	...	...	...	...	...
6	34	Smallpox													
		a) Variola major.....													
		b) Variola minor (alastrim)...													
		c) Unspecified.....													
7	35	Measles.....	10	6	4	2	1	4	3	...	...	...	...	...	...
16	36	Acute poliomyelitis and polio-													
		myelitis and polioencephalitis.	25	12	13	2	...	3	3	1	3	...	2	1	...
17	37	Acute infectious encephalitis													
		(lethargic or epidemic)													
		a) Acute lethargic (or epi-													
		demic) encephalitis.....	1	1	...	...	...	...	...	...	...	...	...	...	...
		b) Sequelae of encephalitis													
		lethargica (Parkinsonism)													
		c) Unspecified encephalitis													
		lethargica.....	1	1	...	...	...	...	...	...	...	...	...	...	...
nil	38	Other diseases due or attributed													
		to viruses													
37		a) Yellow fever.....													
21		b) Rabies.....													
		c) Herpes zoster (Zona).....													
		d) German measles.....													
		e) Varicella (chicken pox)....	1	1	...	1	...	...	...	...	...	...	...	...	...
		f) Others.....													
3	39	DUE TO RICKETTSIA:													
		Typhus and typhus-like													
		diseases (Rickettsioses)													
		a) Louse-borne exanthematic													
		typhus.....													
		b) Typhus-like diseases trans-													
		mitted by other vectors.													
		c) Other and unspecified													
		typhus-like diseases.....													
40	40	DUE TO HELMINTHS: An-													
		kylostomiasis.....													
41	41	Hydatid disease													
		a) Hydatid disease of liver....													
		b) Hydatid disease of other													
		and unspecified organs....													
42	42	Other diseases due to helminths..	1	...	1	...	...	...	...	...	...	...	...	...	...
43	43	DUE TO FUNGI: Mycoses.....													
44	44	Other infective or parasitic													
		diseases													
		a) Venereal diseases (other													
		than syphilis and gonor-													
		rhea).....													
		b) Pernicious lymphogranu-													
		lomatosis (Hodgkin's													
		disease).....	12	10	2	...	...	...	...	...	...	...	...	1	...
		c) Mumps.....													
		d) Other infective or parasitic													
		diseases.....	1	1	...	...	...	...	...	...	...	...	...	...	...
		Total.....	987	559	448	34	19	34	28	14	15	4	8	27	2

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
28	46	28	44	29	32	27	32	54	17	55	19	32	24	49	17	30	15	31	11	28	15	3	3	0	0	33
..	1	1	1	2	1	2	1	4	1	2	1	2	5	1	3	2	7	8	14	..	4	a)
..	1	..	1	..	..	1	..	2	..	..	..	1	1	..	1	..	..	5	2	2	6	..	1	b)
..	34
..	a)
..	b)
..	c)
..	35
2	1	1	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36
..	37
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	a)
..	b)
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	c)
..	38
..	a)
..	b)
..	c)
..	d)
..	e)
..	f)
..	39
..	a)
..	b)
..	c)
..	40
..	41
..	a)
..	1	..	..	..	..	..	..	..	..	..	..	..	b)
..	42
..	43
..	44
..	a)
1	1	1	3	..	2	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	b)
..	c)
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	d)
31	47	29	45	33	35	31	33	60	19	60	21	37	25	53	20	32	21	32	14	35	24	13	23	0	5	

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		II.—Cancer and other Tumours.													
45	45	Cancer and other malignant tumours of the buccal cavity and pharynx													
		a) Lips.....	13	12	1										
		b) Tongue.....	19	19											
		c) Other and unspecified sites	33	30	3										
46	46	Cancer and other malignant tumours of the digestive organs and peritoneum													
		a) Oesophagus.....	31	24	7										
		b) Stomach and duodenum...	227	123	104										
		c) Intestines.....	220	101	119										
		d) Rectum.....	84	46	38										
		e) Liver and biliary passages.	122	49	73										
		f) Pancreas.....	38	25	13										
		g) Peritoneum.....	1		1										
		h) Other organs.....	5	3	2										
47	47	Cancer and other malignant tumours of the respiratory system													
		a) Larynx and trachea.....	35	34	1										
		b) Bronchi, lungs and pleura.	78	60	18										
		c) Other organs.....	4	3	1										
48	48	Cancer and other malignant tumours of the uterus													
		a) Cervix uteri.....	51		51										
		b) Other or unspecified sites.	67		67										
49	49	Cancer and malignant tumours of other female genital organs.	40		40										
50	50	Cancer and malignant tumours of the breast.....	136	1	135										
51	51	Cancer and malignant tumours of the male genital organs....													
		a) Scrotum.....	4	4											
		b) Prostate.....	48	48											
		c) Other or unspecified male genital organs.....	1	1											
nil	52	Cancer and other malignant tumours of the male and female urinary organs.....	85	52	33	1								1	
52	53	Cancer and other malignant tumours of the skin (scrotum excepted).....	8	3	5										
nil	54	Cancer and malignant tumours of the brain and other parts of the nervous system													
		a) Glioma (not specified as benign).....	10	5	5		1								
		b) Sarcoma.....	3	1	2				1						
		c) Other and unspecified malignant tumours.....	15	10	5										
nil	55	Cancer and other malignant tumours of other or unspecified organs													
		a) Adrenal glands.....	5	4	1				1			1		1	
		b) Bones.....	27	15	12									1	
		c) Thyroid gland.....	7	3	4										
		d) Other and unspecified.....	42	26	16				1				2	2	
		Carried over.....	1,459	702	757	1	1	0	3	0	0	1	3	4	

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
																										45
												4		1		1		2		2		2	1			a)
										2		1				3		5		6		1		1		b)
		1						1				4		1		8	1	8		5	1	2	1			c)
																										46
					1	2	2	5	2	8	3	7	8	11	10	25	8	20	19	36	36	4			2	a)
				1	1	2	2	3	10	5	10	13	14	10	14	21	9	14	14	25	35	7	13			b)
2						3	2	1	1	2	3	2	5	5	3	8	5	8	6	10	9	5	4			c)
			1		1	2		2	4		6	3	4	8	9	11	4	6	8	15	27	2	9			d)
			1				1		1	2		7	1	3	1	2	1	4	3	5	1	2	3			e)
																	1									f)
								2									1				1	1				g)
																										h)
																										47
				1	1	1	2	3	2	4		6	3	6	2	15	1	12	3	10	3	2			1	a)
												1	1			1				1						b)
																										c)
			1		2		7		3		8		8		6		7		3		5		2			48
				1	1		2		3		6		10		8		12		10		9		5			a)
																										b)
					1		2		4		3		4		8		6		7		4		1			49
					6		6		12		15	1	18		14		17		16		22		8		1	50
																										51
										1		1						1		1						a)
												1		3		8		16		10		10				b)
																										c)
				1	1			2	1	4	1	5	4	6	1	12	7	6	7	12	6	3	4			52
	1													1				2	2	1	1					53
																										54
2								1		1			1	1	2		1									a)
			1											1												b)
3			2		1			2		1		2					1			1	1	1				c)
																										55
	1	2				1				1				4	2	2	4	2	2	1	2	1	1			a)
				1							2						1		1	1	1					b)
		2			1	1				3	1	5	1	3	3	5	3	1	1	4	3					c)
																										d)
7	2	5	6	4	17	12	27	24	43	36	58	68	88	72	84	134	88	120	102	163	170	50	61	1	4	

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		Carried.....	1,459	702	757	1	1	0	3	0	0	1	3	4	0
54	56	Non-malignant tumours (including dermoid cysts)													
		a) Ovaries.....	2		2										
		b) Uterus.....	4		4										
		c) Other female genital organs.....													
		d) Brain and other parts of the nervous system.....	8	5	3	2									
55	57	e) Other and unspecified.....	13	8	5	1									
		Tumours of undetermined nature													
		a) Ovaries.....													
		b) Uterus.....													
		c) Other female genital organs.....													
		d) Brain and other parts of the nervous system.....	2		2										
		e) Other and unspecified.....	1	1		1									
		Total.....	1,489	716	773	5	1	0	3	0	0	1	3	4	0
		III.—Rheumatism, Diseases of Nutrition and of the Endocrine Glands, other General Diseases and Vitamin Deficiency Diseases.													
56	58	Rheumatic fever													
		a) Acute rheumatic pericarditis.....	1	1										1	
		b) Acute rheumatic endocarditis.....	8	3	5										1
		c) Acute rheumatic myocarditis.....	2	2											
57	59	d) Other forms.....	6	3	3							1			
		Chronic rheumatism and other rheumatic diseases													
		a) Rheumatoid arthritis													
		aa) Chronic rheumatic polyarthritits.....	2	2											
		ab) Arthritis deformans....	2		2										
		ac) Others.....													
		b) Other forms of chronic articular rheumatism....													
		c) Other forms of chronic rheumatism.....	1		1										
58	60	Gout.....													
59	61	Diabetes mellitus													
		a) Simple or with mention of coma.....	66	23	43					1				1	
		b) With mention of cardiovascular complications....	156	46	110										1
		c) With mention of renal complications.....	37	8	29								1		
65	62	Diseases of the pituitary gland....													
		Carried over.....	281	88	193	0	0	0	0	0	1	0	2	2	2

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1938
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
7	2	5	6	4	17	12	27	24	43	36	58	68	88	72	84	134	88	120	102	163	170	50	61	1	4	
																										56
																										a)
																										b)
																										c)
																										d)
																										e)
																										57
																										a)
																										b)
																										c)
																										d)
																										e)
7	3	5	6	4	18	12	28	24	43	36	60	70	88	75	86	134	90	121	104	167	174	50	61	1	5	
																										58
																										a)
																										b)
																										c)
																										d)
																										59
																										aa)
																										ab)
																										ac)
																										b)
																										c)
																										60
																										a)
																										b)
																										c)
																										62
1	2	2	0	0	3	0	1	1	1	3	4	3	14	14	14	15	25	19	38	21	67	7	17	0	2	

Table

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		Carried.....	281	88	193	0	0	0	0	0	1	0	2	2	2
66	63	Diseases of the thyroid and parathyroid glands													
		a) Simple goitre.....	7	3	4										
		b) Exophthalmic goitre.....													
		c) Myxoedema and cretinism.....													
		d) Other diseases of the thyroid gland.....	1	1											
		e) Diseases of the parathyroid glands.....													
67	64	Diseases of the thymus.....	16	10	6	8	6	2							
68	65	Diseases of the adrenal glands (not described as tuberculous)													
		a) Addison's disease, not specified as tuberculous.....	2		2										
		b) Others.....	1		1										
69	66	Other general diseases													
		a) Osteomalacia.....	2		2			1		1					
		b) Other general diseases.....													
60	67	VITAMIN DEFICIENCY:													
		a) Infantile scurvy (Barlow's disease).....													
		b) Other forms.....													
61	68	Beri-beri.....													
69	69	Pellagra.....													
63	70	Rickets.....	1	1		1									
nil	71	Other vitamin-deficiency dis.....	1	1											
		Total.....	312	104	208	9	6	2	1	0	2	0	2	2	2
		IV.—Diseases of the Blood and Blood-Forming Organs.													
70	72	Haemorrhagic conditions													
		a) Primary purpura.....	7	1	6			1							1
		b) Haemophilia.....													
		c) Other and unspecified.....													
71	73	Anaemias (excluding splenic anaemia)													
		a) Pernicious anaemia.....	28	18	10						1				
		b) Other hyperchromic anaemias.....	1		1										
		c) Hypochromic anaemias.....													
		d) Other and unspecified anaemias.....	9	4	5		1	1							1
72	74	Leukaemias and aleukaemias													
		a) Leukaemia.....	41	25	16	1		4		3	2	4		1	
		b) Aleukaemia.....	1		1										
73	75	Diseases of the spleen													
		a) Splenic anaemia.....	1	1											
		b) Banti's disease.....	1	1											
		c) Other diseases of the spleen.....													
74	76	Other diseases of the blood and blood-forming organs													
		a) Agranulocytosis.....	1		1										
		b) Erythrocytosis.....	1	1											
		c) Hemoglobinaemia.....													
		d) Other diseases.....													
		Total.....	91	51	40	1	1	4	2	3	2	5	0	1	2

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	2	2	0	0	3	0	1	1	1	3	4	3	14	14	14	15	25	19	38	21	67	7	17	0	2	63
...	1	...	...	1	...	...	...	...	1	...	...	...	2	1	...	...	...	...	1	...	...	...	a)
...	b)
...	c)
...	1	...	...	...	...	...	...	...	...	...	...	...	...	d)
...	e)
...	64
...	65
...	1	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	a)
...	b)
...	66
...	a)
...	b)
...	67
...	a)
...	b)
...	68
...	69
...	70
...	1	...	...	...	71
1	2	2	0	1	3	0	3	1	1	3	4	4	14	15	14	15	27	20	40	21	67	8	18	0	2	
...	2	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	72
...	a)
...	b)
...	c)
1	1	1	...	...	...	3	3	3	...	2	...	...	1	4	3	3	2	...	...	73
...	1	...	...	a)
...	b)
...	c)
...	2	...	...	1	...	...	...	...	...	...	2	...	...	1	...	...	...	d)
1	1	...	...	...	...	1	...	...	...	1	2	4	2	2	1	1	1	2	2	...	3	...	2	...	...	74
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	b)
...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	75
...	a)
...	b)
...	c)
...	1	...	...	...	...	...	...	1	...	...	...	...	...	76
...	a)
...	b)
...	c)
...	d)
2	3	0	1	0	0	1	1	3	3	2	2	8	6	5	1	3	1	3	3	6	7	3	5	1	0	

Table

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		V.—Chronic Poisoning and Intoxication.													
75	77	Chronic or acute alcoholism (ethylism)													
		a) Acute alcoholism.....													
		b) Chronic alcoholism.....	4	4											
		c) Unspecified alcoholism.....	1	1											
76	78	Lead poisoning													
		a) Specified as occupational...	1	1											
		b) Not occupational.....													
77	79	Chronic poisoning by other mineral and organic substances													
		a) Occupational poisoning.....													
		b) Poisoning by narcotic and soporific drugs													
		ba) Narcotics.....	3		3										
		bb) Soporifics.....													
		c) Other non-occupational....													
		d) Unspecified poisoning.....													
		Total.....	9	6	3			1							
		VI.—Diseases of the Nervous System and Sense Organs													
78	80	Encephalitis (non-epidemic)													
		a) Intra-cranial abscess.....	2	2											
		b) Other forms.....	6	2				3		1					
79	81	Meningitis (non-meningococcal)													
		a) Simple meningitis.....	10	6	4			1	2						
		b) Acute cerebro-spinal meningitis (not due to meningococcus).....	2	1	1	1	1								
80	82	Diseases of the medulla and spinal cord.....	13	11	2										
81	83	Intra-cranial lesions of vascular origin													
		a) Cerebral haemorrhage.....	104	46	58									1	
		b) Cerebral embolism and thrombosis.....	12	7	5										
		c) Softening of the brain.....	9	5	4										
		d) Hemiplegia and other paralysees.....													
		e) Other effusions.....	183	84	99										
nil	84	Mental disorders and deficiency													
		a) Mental deficiency.....	2	1	1		1								
		b) Schizophrenia.....	1	1											
		c) Manic-depressive psychosis.....	2	1	1										
		d) Other mental disorders.....	1	1											
85	85	Epilepsy.....	23	13	10			1	1					2	1
86	86	Convulsions in children under 5 years of age.....													
87	87	Other diseases of the nervous system													
		a) Chorea.....	1	1						1					
		b) Neuritis (non-rheumatic)...													
		c) Paralysis agitans (Parkinson's disease)	7	7											
		d) Disseminated sclerosis.....	21	12	9										
		e) Others.....	2		2					1					
		Carried over.....	401	205	196	1	2	5	3	2	1	0	0	3	1

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

[illegible]

Table

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		Carried	401	205	196	1	2	5	3	2	1	0	0	3	1
88	88	Diseases of the organs of vision													
89	89	Diseases of the ear and of the mastoid process													
		a) Otitis and other diseases of the ear	33	23	10	20	9	2	1						
		b) Diseases of the mastoid process	2	1	1	1	1								
		Total	436	229	207	22	12	7	4	2	1	0	0	3	1
		VII.—Diseases of the Circulatory System.													
90	90	Pericarditis													
		a) Chronic pericarditis specified as rheumatic													
		b) Others	3	3											
91	91	Acute endocarditis excluding rheumatic endocarditis													
		a) Acute bacterial endocarditis	5	3	2							1			1
		b) Sub-acute bacterial endocarditis	1		1										
		c) Other forms	3	2	1										
92	92	Chronic affections of the valves and endocardium													
		a) Aortic valvular disease without mitral lesion	40	20	20				1	1			1		
		b) Other specified valvular diseases of rheumatic origin	46	19	27						2		2		1
		c) Unspecified valvular lesions or endocarditis	242	104	138		1								9
93	93	Diseases of the myocardium, including aneurism of heart													
		a) Acute myocarditis	17	9	8									1	
		b) Chronic myocarditis specified as rheumatic	11	5	6										
		c) Myocardial degeneration, sclerosis and non-rheumatic myocarditis	317	184	133			1			1				
		d) Other myocarditis	1,084	614	470		1								
94	94	Diseases of the coronary arteries and angina pectoris													
		a) Diseases of the coronary arteries	558	423	135										
		b) Angina pectoris	72	58	14										
95	95	Other diseases of the heart													
		a) Functional heart disease without mention of organic lesion	54	24	30				1					1	
		b) Heart diseases specified as rheumatic	16	8	8										
		c) Other and unspecified	26	11	15			1							
96	96	Aneurism, except of heart	7	4	3										
97	97	Arteriosclerosis, excluding diseases of the coronary arteries, renal sclerosis and cerebral haemorrhage	103	57	46										
		Carried over	2,605	1,548	1,057	0	2	2	2	1	3	1	3	2	11

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
3	4	3	4	7	3	5	4	3	4	7	4	18	10	22	12	26	12	23	17	52	76	23	38	2	1		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	88
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	89
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
3	4	3	4	7	3	6	4	3	4	7	4	18	10	22	12	26	12	23	17	52	76	23	38	2	1		
...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	90
...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	a)
...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	c)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	92
...	...	1	...	4	1	...	...	...	...	1	2	4	...	...	...	...	1	6	...	1	9	2	4	...	1	...	a)
1	3	1	...	1	1	5	3	2	1	1	2	1	2	...	3	2	2	1	2	3	2	1	1	...	...	...	b)
4	...	2	2	5	4	5	4	5	6	8	12	16	5	9	8	10	14	9	15	19	30	11	24	1	4	...	c)
...	...	...	...	...	...	...	...	...	1	1	...	1	1	1	...	1	...	1	...	3	3	...	2	...	1	...	93
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	1	1	1	1	2	2	...	...	...	1	b)
...	...	...	...	1	1	...	2	...	1	...	2	2	6	1	8	5	14	10	33	7	69	61	41	32	6	13	c)
1	3	1	2	4	2	14	10	13	18	25	10	50	28	90	35	84	43	86	48	174	157	60	93	12	20	...	d)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	94
...	...	...	...	2	...	8	1	25	4	39	5	50	10	54	17	78	18	75	27	73	38	19	14	...	1	...	a)
...	...	...	...	...	...	3	...	4	...	3	...	9	1	5	4	9	1	14	2	11	3	...	3	...	...	...	b)
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	95
1	1	...	...	...	...	...	1	...	1	1	2	1	1	2	2	3	4	3	2	7	10	4	4	1	1	...	a)
...	1	...	...	3	1	1	1	...	1	1	...	1	2	1	...	...	1	...	...	...	1	...	...	1	...	...	b)
...	...	...	...	...	1	...	...	...	...	...	...	1	2	3	1	1	2	...	...	2	6	2	3	1	...	...	c)
...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	1	1	...	...	...	2	1	...	...	...	...	...	96
...	...	...	...	1	...	...	...	1	1	...	...	...	...	1	1	...	2	6	1	18	15	28	23	2	3	...	97
8	9	5	5	23	11	38	22	52	33	82	35	141	53	176	78	205	99	236	105	384	338	168	203	24	45	...	

Table

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		Carried.....	2,605	1,548	1,057	0	2	2	2	1	3	1	3	2	11
98	98	Gangrene													
		a) Senile.....	7	4	3										
		b) Others.....	1		1										
99	99	Other diseases of the arteries....	38	21	17										
100	100	Diseases of the veins: varices, haemorrhoids, phlebitis, etc.													
		a) Varices.....	1		1										
		b) Other diseases of the veins.	5	1	4										
101	101	Diseases of the lymphatic sys- tem, lumphanitis, etc.....													
102	102	High blood pressure (idiopathic).	2	1	1										
103	103	Other diseases of the circulatory system.....													
		Total.....	2,659	1,575	1,084	0	2	2	2	1	3	1	3	2	11
		VIII.—Diseases of the Respiratory System.													
104	104	Diseases of the nasal fossae and annexa													
		a) Diseases of the nasal fossae.	2	2											
		b) Others, including sinusitis..													
105	105	Diseases of the larynx.....													
106	106	Bronchitis:													
		a) Acute.....	7	2	5	2	3								
		b) Chronic.....	17	14	3			1	1						
		c) Unspecified.....	9	5	4				1						
107	107	Bronchopneumonia (including capillary bronchitis).....	279	158	121	80	57	16	5	3					1
108	108	Lobar pneumonia (pneumococ- cal).....	117	61	56	8	11	3			1	1		2	
109	109	Pneumonia (unspecified) includ- ing acute congestion of the lung.....	65	24	41	4	3		1				1		2
110	110	Pleurisy													
		a) Empyema.....	7	5	2	2	2	1							
		b) Other or unspecified forms of pleurisy.....	4	3	1			1							
111	111	Congestion, oedema, embolism, haemorrhagic infarction and thrombosis of the lungs													
		a) Haemorrhagic infarction of the lung.....	1		1										
		b) Acute oedema of the lung..	1	1											
		c) Chronic or unspecified con- gestion of the lung.....	4	1	3										
112	112	Asthma.....	18	13	5										
113	113	Pulmonary emphysema.....	2	2											
114	114	Other diseases of the respiratory system, except tuberculosis													
		a) Silicosis.....	3	2	1										
		b) Other occupational respir- atory diseases.....													
		c) Gangrene of the lung.....													
		d) Abscess of the lung.....													
		e) Other diseases of the res- piratory system.....	6	4	2										
		Total.....	542	297	245	96	76	22	8	3	1	1	1	2	3

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
8	9	5	5	23	11	38	22	52	33	82	35	141	53	176	78	205	99	236	105	384	338	168	203	24	45	98
...	1	1	2	3	...	...	...	...	a)
...	b)
...	1	...	...	...	3	...	...	4	4	2	1	4	...	6	2	5	6	...	...	99
...	1	...	...	...	1	...	1	...	...	...	2	...	...	...	...	100
...	a)
...	b)
...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	101
...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	102
...	103
8	9	5	5	23	11	38	23	52	33	83	40	142	53	180	83	207	101	240	106	391	344	176	210	24	45	...
...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	104
...	a)
...	b)
...	105
...	106
...	1	1	2	...	1	...	2	...	1	...	2	...	3	1	...	1	...	a)
...	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	b)
...	1	...	...	...	1	...	...	1	...	...	2	1	...	...	...	...	1	...	1	...	...	...	c)
1	2	...	...	2	...	3	1	2	...	1	1	5	3	5	2	7	1	4	6	15	20	12	17	2	5	107
1	1	...	1	1	2	...	2	1	...	1	1	7	2	6	1	8	3	5	8	11	14	5	7	1	2	108
...	1	...	...	...	1	...	...	2	1	3	3	1	2	1	1	3	...	1	3	6	7	2	13	1	2	109
...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	110
...	a)
...	1	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	b)
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	111
...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	a)
...	b)
...	1	1	...	2	...	...	c)
...	1	...	2	1	3	...	2	...	3	2	...	1	1	...	1	1	...	...	112
...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	113
...	1	...	...	...	...	1	...	...	...	...	1	...	...	...	...	114
...	a)
...	b)
...	...	1	...	...	...	...	2	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	c)
...	d)
...	e)
2	4	1	1	4	3	3	5	10	3	13	7	19	7	19	5	24	6	14	19	39	44	21	42	4	10	...

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		IX.—Diseases of the Digestive system.													
115	115	Diseases of the buccal cavity and annexe and of the pharynx and tonsils (including adenoid vegetations)													
		a) Diseases of the teeth and gums.....													
		b) Septic sore throat.....													
		c) Other diseases of the pharynx and tonsils.....	2	1	1					1					
		d) Diseases of other and unspecified sites.....	11	5	6	2	1	3	1		1		2		
116	116	Diseases of the oesophagus.....	2		2										
117	117	Ulcer of the stomach or duodenum													
		a) Stomach.....	57	40	17										
		b) Duodenum.....	17	16	1	1									
118	118	Other diseases of the stomach (except cancer and other malignant tumours).....	13	8	5										
119	119	Diarrhoea, enteritis (under 2 years of age).....	80	46	34	40	31	6	3						
120	120	Diarrhoea, enteritis and ulceration of the intestines (2 years of age and over)													
		a) Diarrhoea and enteritis....	16	7	9			2		1	1			1	
		b) Ulceration of the intestines.....	11	5	6										
121	121	Appendicitis.....	36	14	22				1		1	2		2	4
122	122	Hernia, intestinal obstruction													
		a) Hernia.....	41	20	21										
		b) Intestinal obstruction.....	21	11	10	1								1	
123	123	Other diseases of the intestines (including intestinal infection by B. Coli)													
		a) Diverticulitis.....	3		3										
		b) Other diseases of the intestines.....	11	6	5	1						1			
124	124	Cirrhosis of the liver													
		a) With mention of alcoholism.....	30	23	7										
		b) Without mention of alcoholism.....	72	40	32	1		2		1					
125	125	Other diseases of the liver													
		a) Acute yellow atrophy (not associated with pregnancy or the puerperium)...	7	6	1	1		1							
		b) Other diseases of the liver..	15	8	7			2							
126	126	Biliary calculi.....	37	13	24										
127	127	Other diseases of the gall-bladder and bile ducts													
		a) Cholecystitis without record of biliary calculi....	31	9	22										1
		b) Others.....	7	4	3										
128	128	Diseases of the pancreas.....	7	3	4		2								
129	129	Peritonitis without stated cause.													
		Total.....	527	285	242	47	34	16	5	3	3	3	2	4	5

XXI

causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
																										115	
																										a)	
																										b)	
												1														c)	
																				1						d)	
																2										116	
				2				4		7		5	4	4	1	3	1	5	3	6	4	3	3	1	1	117	
				2				1		3		1		2		1	1	1		4						a)	
																										b)	
		2								1	1	1		1		1	1		2	2			1			118	
																										119	
			1		2				1				2			1		1				1	1	1			120
																										a)	
			1						1		1	2								2	2	1	1			b)	
		1		1	1		1	2	1	1	2	2	1	2	1		5	1	2		1		1			121	
									1	1		4	2		3	4	4	3		3	7	3	3	1	1	122	
	1		1			1				2						1		2	2	2	3	1	2			a)	
																										b)	
															1					1			1			123	
																										a)	
				1		1			1		1				1			2	1	1						b)	
				1				1		2	2	5		4	2	2		4	2	4	1					124	
																										a)	
		1						2	3	1	3	5		5	3	3	1	6	8	10	10	3	3		1	b)	
																										125	
				1		1				1		1										1				a)	
				1		1		2	1				2			1		1				1		3		b)	
					1		1		2	1	2	3	6	1	3	2	3	3	5	2			1	1		126	
																										127	
			1	1				1	2	1	1	1	1		1	2	4	2	4	1	4		3			a)	
							1					2	1				1	2								b)	
									1			1	1			1				1						128	
																										129	
0	1	5	4	9	4	5	3	13	14	21	13	33	22	20	15	22	25	32	30	37	36	13	23	2	3		

Table

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		X.—Diseases of the Urinary and Genital Systems.													
130	130	Acute nephritis.....	14	10	4									1	
131	131	Chronic nephritis													
		a) Secondary to acute ne- phritis.....	2		2										
		b) Arteriosclerotic kidney.....	814	391	423			1		2				1	1
		c) Chronic nephritis not other- wise specified.....	256	110	146					1				1	1
132	132	Nephritis not stated to be acute or chronic.....	126	67	59	2				1					
133	133	Other diseases of the kidneys and ureters (not connected with pregnancy)													
		a) Pyelitis, pyelonephritis and pyelocystitis.....	21	13	8										
		b) Others.....	4	2	2										
134	134	Calculi of the urinary passages													
		a) Calculi of the kidneys and ureters.....	3	2	1										
		b) Calculi of the bladder.....	1	1											
		c) Calculi of unstated site....													
135	135	Diseases of the bladder (except tumours)													
		a) Cystitis.....	3	3											
		b) Other diseases of the blad- der.....													
136	136	Diseases of the urethra, urinary abscess, etc.													
		a) Structure of the urethra....													
		b) Others.....	1	1											
137	137	Diseases of the prostate													
		a) Hypertrophy of the pros- tate.....	41	41											
		b) Others.....	8	8											
138	138	Diseases of other male genital organs (not specified as vene- real).....													
139	139	Diseases of the female genital organs (not specified as vene- real, or connected with preg- nancy or the puerperal state)													
		a) Diseases of the ovaries, fallopian tubes and para- metria.....	6		6									1	
		b) Diseases of the uterus.....	9		9										
		c) Diseases of the breast.....													
		d) Other diseases of the fe- male genital organs.....													
		Total.....	1,309	649	660	2	0	1	0	2	2	0	4	2	

XXI

causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
				2	1			2				1	2	1	1		2				1					130
																										131
	3	2	2	2	5	2	6	8	4	17	14	20	17	34	22	44	34	61	46	131	143	59	112	7	13	a)
1	1			1	1	5	2		6	4	5	13	5	9	15	13	8	19	19	24	40	17	36	3	5	b)
			1	2		4	2	3	3		3	6	6	4	5	6	6	9	6	21	13	9	12	1	1	c)
																										132
																										133
				1		1		1		2	2	1	1	1	2	2	1	1	1	2	1	1				a)
									1					1						1						b)
																										134
						1						1														a)
																		1								b)
																										c)
																1		2								135
																										a)
																										b)
																										136
																				1						a)
																										b)
				1										1		6		7		16		10				137
										1								1		4		2				a)
																										b)
																										138
																										139
	1		1		1			1			3		2		1								1			a)
																										b)
																										c)
																										d)
1	5	2	4	9	9	13	10	14	16	24	27	41	34	52	47	73	49	103	72	200	197	99	161	11	19	

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
																										140
																										a)
																										aa)
																										ab)
																										b)
										1																ba)
																										bb)
			3			1																				bc)
																										141
																										a)
																										aa)
																										ab)
																										b)
																										ba)
																										bb)
																										bc)
																										142
						2																				a)
			1																							b)
																										c)
																										143
																										a)
																										b)
																										c)
	1			1		1																				144
																										a)
				1		1																				b)
																										c)
																										d)
			1			1																				145
	1			7																						

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
..	1	...	7	...	6	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146
..	1	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
..	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
..	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
..	2	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	d)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	147
..	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	d)
..	1	...	...	...	1	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	148
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
..	1	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	d)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	149
..	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	150
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
..	9	...	10	...	11	...	4	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	151
..	...	...	...	...	...	1	...	1	...	...	...	1	...	1	...	...	...	1	...	...	...	...	...	...	1	152
..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	153
..	...	...	...	...	...	1	...	1	...	...	1	1	...	1	...	...	...	1	...	...	...	...	...	...	1	...
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	154
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	a)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	c)
..	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	1	...	1	...	155
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	156
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	a)
..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	b)
..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	...	1	...	...	...	1	...	1	...

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		XIV.—Congenital Malformations.													
157	157	Congenital malformations													
		a) Congenital hydrocephalus..	35	16	19	13	19	2	...	1	...	...	...	...	...
		b) Spina bifida and menin- gocele.....	31	13	18	12	17	1	1	...	...	...	...	...	...
		c) Congenital malformation of heart.....	98	61	37	57	30	2	4	...	1	...	...	1	...
		d) Monstrosities.....	16	6	10	6	9	...	1	...	...	...	...	...	...
		e) Congenital pyloric stenosis.	3	3	...	3	...	...	...	...	...	...	...	...	...
		f) Cleft palate, harelip.....	3	1	2	1	2	...	...	...	...	...	...	...	...
		g) Imperforate anus.....	2	2	...	2	...	...	...	...	...	...	...	...	...
		h) Cystic disease of kidney...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		i) Other stated congenital malformations													
		ia) Central nervous sys- tem.....	4	3	1	2	1	1	...	...	...	...	...	...	...
		ib) Circulatory system....	12	5	7	5	7	...	...	...	...	...	...	...	...
		ic) Digestive system.....	18	10	8	9	7	...	...	...	...	...	...	...	...
		id) Genito-urinary sys- tem.....	5	4	1	2	1	...	...	...	...	...	...	...	...
		ie) Other sites.....	9	6	3	5	3	...	...	...	...	...	...	...	...
		j) Unspecified.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Total.....	236	130	106	117	96	6	6	1	1	...	...	1	...
		XV.—Diseases Peculiar to the First Year of Life.													
158	158	Congenital debility.....	47	25	22	25	22	...	...	...	...	...	...	...	...
159	159	Premature birth.....	332	189	143	189	143	...	...	...	...	...	...	...	...
160	160	Injury at birth													
		a) Intra-cranial or spinal hae- morrhage													
		aa) With operation.....	25	15	10	15	10	...	...	...	...	...	...	...	...
		ab) Without operation.....	8	5	3	5	3	...	...	...	...	...	...	...	...
		b) Other intra-cranial or spinal injuries													
		ba) With operation.....	3	2	1	2	1	...	...	...	...	...	...	...	...
		bb) Without operation....	1	1	...	1	...	...	...	...	...	...	...	...	...
		c) Other birth injuries													
		ca) With operation.....	46	27	19	27	19	...	...	...	...	...	...	...	...
		cb) Without operation....	50	33	17	33	17	...	...	...	...	...	...	...	...
161	161	Other diseases peculiar to the first year of life													
		a) Asphyxia during or after birth, atelectasis.....	23	14	9	14	9	...	...	...	...	...	...	...	...
		b) Intoxication due to ma- ternal toxæmia.....	12	10	2	10	2	...	...	...	...	...	...	...	...
		c) Infections of the new- born, including non-sy- philitic pemphigus.....	14	10	4	10	4	...	...	...	...	...	...	...	...
		d) Melaena neonatorum.....	1	.....	1	...	1	...	...	...	...	...	...	...	...
		e) Other specified diseases....	4	2	2	2	2	...	...	...	...	...	...	...	...
		Total.....	566	333	233	333	233	...	...	...	...	...	...	...	...

[illegible]

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		XVI.—Senility, Old Age.													
162	162	Senility, old age													
		a) Old age.....	8	3	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		b) Senility with mention of senile dementia.....	7	4	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		c) Senility without mention of senile dementia.....	10	3	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Total.....	25	10	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		XVII.—Violent or Accidental Deaths.													
163	163	Suicide by poisoning													
		a) Solid or liquid toxic or corrosive substances													
		aa) By corrosive sub.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		ab) By analgesic and nar- cotic drugs.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		ac) By soporific drugs (not liquid anaesthetics)....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		ad) By other substances....	7	3	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		b) Suicide by poisonous gas													
		ba) By coal-gas.....	6	1	5	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
		bb) By motor exhaust gases.....	6	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		bc) By other gases.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
171	164	Other forms of suicide													
		a) By hanging or strangu- lation.....	21	14	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		b) By drowning.....	9	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		c) By fire-arms and explosives.	6	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		d) Suicide by cutting or pierc- ing instruments.....	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		e) Suicide by jumping from high places.....	4	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		f) Suicide by crushing													
		fa) Suicide on railways....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		fb) Other suicide by crushing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		g) Other or unspecified.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
172	165	Infanticide (infants under 1 year).....	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
173	166	Homicide by fire-arms (ages 1 year and over).....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
174	167	Homicide by cutting or piercing instruments (ages 1 year and over).....	3	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
175	168	Homicide by other or unspecified means (ages 1 year and over)..	8	5	3	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
nil	169	Accidents on railways and tram- ways.....	22	18	4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
...	170	Automobile accidents													
		a) Collisions with trains.....	6	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
		b) Collisions with trams.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		c) Other auto accidents.....	120	85	35	.....	1	6	5	11	.....	5	.....	4	3
		Carried over.....	233	165	68	1	1	6	5	11	2	5	0	7	3

XXXI

Causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
																				3	1		2		2	162
																				3		1	2		1	a)
																						3	4		3	b)
																				6	1	4	8		6	c)
																										163
							1	1																		a)
									1			1														aa)
										1			1													ab)
	1				1			2	2	1			1			1										ac)
																										ad)
	2		1										1										1			b)
					1	1		1			1			1		1										ba)
																										bb)
																										bc)
																										164
					1	1	1	2	2		3	3		1		4	1			2						a)
						1	2	1	1		1					2						1				b)
		1			1			2				1		1												c)
1										2		1						1								d)
		1	1					1			1															e)
																										f)
																										fa)
																										fb)
																										g)
																										165
							1			2																166
									1	1						1										167
					2		1		1		1	1														168
2					1		1			5		3		1			2	1	2	3						169
																										170
2							1							1			1									a)
2	6	4	2	5	2	4	2	6	4	5	4	7	1	7	1	6	1	3	1	8	2	2				b)
7	9	6	4	10	6	11	6	19	7	16	10	18	3	12	1	14	5	6	3	13	2	3	1	0	0	c)

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
		Carried.....	233	165	68	1	1	6	5	11	2	5	0	7	3
...	171	Other transport accidents													
		a) Tramway accidents on roads.....	3	1	2					1					
		b) Other accidents.....	8	6	2				1						
...	172	Water transport accidents.....	1	1											
...	173	Air transport accidents.....	3	2	1										
...	174	Accidents in mines and quarries..	2	2											
...	175	Agricultural and forestry ac- cidents													
		a) Accidents from farm ma- chinery.....													
		b) Injuries by animals in farming, etc.													
		ba) By venomous animals.													
		bb) By other animals.....													
		c) Other accidents.....													
...	176	Accidents caused by machinery, excluding accidents due to transport, agricultural or for- estry machinery, or in mines or quarries.....	3	3											
177	177	Food poisoning.....	1		1										
178	178	Accidental absorption of poi- sonous gases.....	12	10	2										
179	179	Other acute accidental poisoning (not by gas).....	3	2	1			1							
180	180	Conflagration.....	15	9	6	1	1	1	1						
181	181	Accidental burns (conflagration excepted).....	9	4	5			1						1	
182	182	Accidental mechanical suffoca- tion.....	2	1	1	1	1								
183	183	Accidental drowning.....	45	42	3							5		6	
184	184	Accidental injury by fire-arms (except war injuries).....	7	7								1		1	
185	185	Accidental injury by cutting or piercing instruments (except war injuries).....													
186	186	Accidental injury by fall, crush- ing, landslide, etc.....	140	80	60			3	3	2		2		1	
187	187	Cataclysm (all deaths, whatever their cause).....													
188	188	Injury by animals.....													
189	189	Hunger and thirst.....													
190	190	Excessive cold.....													
191	191	Excessive heat.....													
192	192	Lightning.....													
193	193	Other accidents due to electric currents.....	2	2										2	
176	194	Attack by venomous animals.....													
		Carried over.....	494	339	155	3	3	12	10	14	2	14	0	18	

XXXI

Causes of deaths by sex and age group—year 1945—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
7	9	6	4	10	6	11	6	19	7	16	10	18	3	12	1	14	5	6	3	13	2	3	1	0	0	171
1		2										1	1							1			2			a)
1														1						1						b)
	1	1		1																						172
1													1													173
														1												174
																										175
																										a)
																										b)
																										ba)
																										bb)
																										c)
		1		1		1			1																	176
										1																177
				1				1			1	3		1		2		1	1			1				178
						1	1							2				2	1	1	1					179
			1					1					1	2				2	1	1	1					180
1	1									1	1		1		1						1					181
																										182
5		4	1	1		4	1	2		2	1	2		5		3				3						183
		3						1										1								184
																										185
3	2	2	1	5		6		6		10	1	4	1	9	8	5	2	5	1	11	20	7	22	1	2	186
																										187
																										188
																										189
																										190
																										191
																										192
																										193
																										194
19	13	19	7	19	6	23	8	30	8	29	14	28	6	31	10	24	7	15	6	29	25	11	25	1	2	

Table

Classification of deaths according to the International List of

No. of 1929	No. of 1939	International Classification	Total	M	F	Under 1 year		1 to 4 years		5 to 9 years		10 to 14 years		15 to 19 years	
						M	F	M	F	M	F	M	F	M	F
194	195	Carried	494	339	155	3	3	12	10	14	2	14	0	18	
		Other accidents													
		a) Vaccinia and other se- quelae of vaccination against smallpox.													
		b) Other accidents due to medical or surgical in- tervention													
		ba) Anaesthetic accidents..	5	2	3			1							
		bb) Other accidents.	4	1	3		1								
		c) Lack of care of the new- born.	3	3		3									
		d) Other accidents.	3	3		1		1							
nil	196	Deaths of persons in military service during operations of war													
		a) From poison gas.													
		b) From wounds.	1	1											
		c) From other causes.													
nil	197	Deaths of civilians due to oper- ations of war													
		a) From poison gas.													
		b) From wounds.													
		c) From other causes.													
198	198	Legal executions.	2	2											
		Total.	512	351	161	7	4	14	9	14	2	14	0	18	
		XVIII.—Ill-defined Causes of Death.													
199	199	Sudden death.	1	1										1	
200	200	Causes of death unstated or ill-defined													
		a) Ill-defined causes.	7	4	3										
		b) Found dead, cause un- known.	1	1											
		c) Other deaths from un- known causes.													
		Total.	9	6	3									1	
		Total M.		5,315		675		109		43		29		69	
		Total F.			4,452		485		68		32		23		63
		Grand total.	9,767			1,160		177		75		52		132	

XXI

causes of deaths by sex and age group—year 1946—(continued)

20 to 24 years		25 to 29 years		30 to 34 years		35 to 39 years		40 to 44 years		45 to 49 years		50 to 54 years		55 to 59 years		60 to 64 years		65 to 69 years		70 to 79 years		80 to 89 years		Over 90 years		No. of 1939
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
9	13	19	7	19	6	23	8	30	8	29	14	28	6	31	10	24	7	15	6	29	25	11	25	1	2	195
																										a)
	1						1					1	1		2			1								b) ba) bb)
												1														c) d)
												1														196
1																										a) b) c)
																										197
																										a) b) c)
1								1																		198
1	14	19	7	19	6	23	9	31	8	29	14	30	7	31	12	24	7	16	6	29	25	11	25	1	2	
																										199
									1									2	1	1		1				200
																1										a)
																										b)
																										c)
									1							1		2	1	1		1				
7	...	71	...	109	...	134	...	213	...	279	...	403	...	474	...	563	...	608	...	989	...	423	...	47	...	
	102	...	87	...	105	...	122	...	148	...	193	...	266	...	296	...	340	...	414	...	995	...	614	...	99	
179	158		214		256		361		472		669		770		903		1,022		1,984		1,037		146			

Meteorological Service of Canada
Observations made at McGill Observatory, Montréal
Height above sea level 100 feet

Month	Thermometer					*Barometer			
	†Mean	(a) Deviation from 72 years means	Maximum	Minimum	Mean daily range	†Mean	Maximum	Minimum	Mean daily range
January.....	15.99	+ 2.35	50.1	-14.6	15.43	30.250	30.68	29.26	0.447
February.....	12.79	- 2.73	43.8	-15.0	16.52	30.012	30.71	29.05	0.405
March.....	39.23	+12.83	76.2	13.9	17.25	30.040	30.48	29.32	0.243
April.....	42.91	+ 1.75	75.2	18.8	16.02	29.929	30.53	29.34	0.316
May.....	54.44	- 0.75	80.1	27.6	15.71	29.939	30.36	29.57	0.208
June.....	65.32	+ 0.53	90.0	39.8	17.01	29.983	30.37	29.53	0.188
July.....	69.66	+ 0.24	89.6	49.0	16.41	30.015	30.34	29.67	0.163
August.....	65.05	- 0.07	85.8	46.2	15.76	29.981	30.28	29.51	0.128
September.....	62.62	+ 3.75	81.6	40.4	17.77	30.117	30.54	29.53	0.192
October.....	51.52	+ 4.64	76.1	29.3	17.10	30.067	30.61	29.34	0.266
November.....	36.90	+ 3.30	54.1	14.7	11.57	30.062	30.71	29.54	0.297
December.....	22.00	+ 2.44	54.4	- 7.5	13.50	30.014	30.83	29.04	0.395
Sums for 1946.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Means for 1946.....	44.87	+ 2.36	.....	.....	15.80	30.017	.....	.....	0.271
Means for 72 years ending December 31st, 1946.....	42.66	.....	.....	.....	15.27	29.983	.....	.....	0.235

* Barometer readings reduced to sea level and 32°F. † The monthly Thermometer and Barometer means are from bi-hourly readings from self-recording instruments. (a) “+” indicates that the temperature has been higher, “-” that it has been lower than the average for 72 years. ‡ Humidity relative, saturation being 100. Means of readings every four hours from recording hygrometer. π For .. years only. § For 65 years only. The anemometer and wind vane are exposed at the summit of Mount-Royal, 54 feet above the ground and 807 feet above sea level.

The greatest heat was 90.0 (Fah.) above zero, on June 26th, the greatest cold was 15.0 below zero on February 16th. The extreme range of temperature was therefore 105.0 degrees. The greatest temperature range in one day was 42.5 on January 13th. The least range was 3.9 on November 3rd. The warmest day was

Canada, abstract for year 1946

Canada.—Latitude 45° 30' N.—Longitude 73° 35' W.

Sea level 187'

‡Mean relative humidity	Wind		§Percent possible sunshine	Precipitation						
	Resultant direction	Mean velocity, M. P. H.		Inches rain	No. of days on which rain or sleet fell	Inches, snow	Inches of rain and melted snow	No. of days on which snow fell	No. of days on which rain and snow fell	No. of days on which rain or snow fell
75.6	40.6	0.77	7	28.0	3.46	23	5	25
70.1	39.8	0.58	3	23.2	2.66	20	2	20
67.0	53.1	1.31	11	0.6	1.36	4	1	14
71.5	41.0	2.74	14	1.2	2.93	8	5	18
68.0	48.2	4.18	14	....	4.18	....	....	14
69.4	62.8	2.01	13	....	2.01	....	....	13
66.5	64.6	3.11	11	....	3.11	....	....	11
76.0	51.0	4.41	17	....	4.41	....	....	17
75.0	60.3	5.40	12	....	5.40	....	....	12
75.9	48.6	4.59	11	1.8	4.77	1	1	11
79.3	22.7	2.98	14	8.9	3.77	9	3	20
78.8	30.7	2.27	9	37.9	5.83	21	5	25
....	136	....	..	86	22	200
72.67	46.96	34.35	....	101.6	43.89	....	....	....
73.91	43.21	29.91	....	112.3	41.69	....	....	....

June 26th when the mean temperature was 80.1 above zero. The coldest day was January 20th when the mean temperature was 8.5 below zero. The minimum relative humidity observed was .. on ... Hail on 3 days. Fog on 29 days. Thunderstorms on 18 days. Auroras observed on .. nights. Lunar halos on .. nights. Solar halos on .. days. First trace of snow on October 1st. First appreciable snowfall on October 1st. First sleighing on ... First zero weather on December 16th. Navigation season approximate dates ... The total wind mileage was ... The resultant mileage was ... Resultant direction ... The greatest velocity in one hour was .., on ... The greatest rainfall in one day was 1.80 inches on September 30th. The heaviest snowfall was on December 21st when 7.3 inches fell in .. hours.

Note:—Yearly means are averages of Monthly means.



